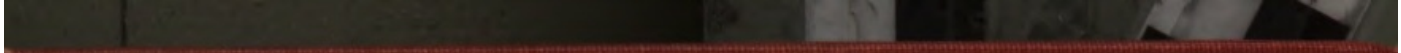

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THE SOVIET FAR EAST

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THE SOVIET FAR EAST AND CENTRAL ASIA

By

WILLIAM MANDEL

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I. P. R. INQUIRY SERIES

INTERNATIONAL SECRETARIAT
INSTITUTE OF PACIFIC RELATIONS
Publications Office, 1 East 54th Street, New York
1944

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FOREWORD

This study forms part of the documentation of an Inquiry organized by the Institute of Pacific Relations into the problems arising from the conflict in the Far East.

It has been prepared by Mr. William Mandel, Research Associate, American Russian Institute.

The Study has been submitted in draft to a number of authorities, many of whom made suggestions and criticisms which were of great value in the process of revision.

Though many of the comments received have been incorporated in the final text, the above authorities do not of course accept responsibility for the study. The statements of fact or of opinion appearing herein do not represent the views of the Institute of Pacific Relations or of the Pacific Council or of any of the National Councils. Such statements are made on the sole responsibility of the author.

During 1938 the Inquiry was carried on under the general direction of Dr. J. W. Dafoe as Chairman of the Pacific Council and since 1939 under his successors, Dr. Philip C. Jessup and Mr. Edgar J. Tarr. Every member of the International Secretariat has contributed to the research and editorial work in connection with the Inquiry, but special mention should be made of Mr. W. L. Holland, Miss Kate Mitchell and Miss Hilda Austern, who have carried the major share of this responsibility.

In the general conduct of this Inquiry into the problems arising from the conflict in the Far East the Institute has benefited by the counsel of the following Advisers:

Professor H. F. Angus of the University of British Columbia.

Dr. J. B. Condliffe of the University of California.

M. Etienne Dennery of the Ecole des Sciences Politiques.

These Advisers have co-operated with the Chairman and the Secretary-General in an effort to insure that the publications issued in connection with the Inquiry conform to a proper standard of sound and impartial scholarship. Each manuscript has been submitted to at least two of the Advisers and although they do not necessarily subscribe to the statements or views in this or any of the studies, they consider this study to be a useful contribution to the subject of the Inquiry.

The purpose of this Inquiry is to relate unofficial scholarship to the problems arising from the present situation in the Far East. Its

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purpose is to provide members of the Institute in all countries and the members of I.P.R. Conferences with an impartial and constructive analysis of the situation in the Far East with a view to indicating the major issues, which must be considered in any future adjustment of international relations in that area. To this end, the analysis will include an account of the economic and political conditions which produced the situation existing in July 1937, with respect to China, to Japan and to the other foreign Powers concerned; an evaluation of developments during the war period which appear to indicate important trends in the policies and programs of all the Powers in relation to the Far Eastern situation; and finally, an estimate of the principal political, economic and social conditions which may be expected in a post-war period, the possible forms of adjustment which might be applied under these conditions, and the effects of such adjustments upon the countries concerned.

The Inquiry does not propose to "document" a specific plan for dealing with the Far Eastern situation. Its aim is to focus available information on the present crisis in forms which will be useful to those who lack either the time or the expert knowledge to study the vast amount of material now appearing or already published in a number of languages.

The present study, "The Soviet Far East," falls within the framework of the first of the four general groups of studies which it is proposed to make as follows:

I. The political and economic conditions which have contributed to the present course of the policies of Western Powers in the Far East; their territorial and economic interests; the effects on their Far Eastern policies of internal economic and political developments and of developments in their foreign policies vis-à-vis other parts of the world; the probable effects of the present conflict on their positions in the Far East; their changing attitudes and policies with respect to their future relations in that area.

II. The political and economic conditions which have contributed to the present course of Japanese foreign policy and possible important future developments; the extent to which Japan's policy toward China has been influenced by Japan's geographic conditions and material resources, by special features in the political and economic organization of Japan which directly or indirectly affect the formulation of her present foreign policy, by economic and political developments in China, by the external policies of other Powers affecting Japan; the principal political, economic and social factors which may be expected in a post-war Japan; possible and probable adjustments on the part of other nations which could aid in the solution of Japan's fundamental problems.

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III. The political and economic conditions which have contributed to the present course of Chinese foreign policy and possible important future developments; Chinese unification and reconstruction, 1931-37, and steps leading toward the policy of united national resistance to Japan; the present degree of political cohesion and economic strength; effects of resistance and current developments on the position of foreign interests in China and changes in China's relations with foreign Powers; the principal political, economic and social factors which may be expected in a post-war China; possible and probable adjustments on the part of other nations which could aid in the solution of China's fundamental problems.

IV. Possible methods for the adjustment of specific problems, in the light of information and suggestions presented in the three studies outlined above; analysis of previous attempts at bilateral or multilateral adjustments of political and economic relations in the Pacific and causes of their success or failure; types of administrative procedures and controls already tried out and their relative effectiveness; the major issues likely to require international adjustment in a post-war period and the most helpful methods which might be devised to meet them; necessary adjustments by the Powers concerned; the basic requirements of a practical system of international organization which could promote the security and peaceful development of the countries of the Pacific area.

EDWARD C. CARTER
Secretary-General

New York,
May 15, 1943

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AUTHOR'S PREFACE

The future of the Pacific area will have been decided not alone on its battlefields, but in Europe where the bulk of the forces of the opposing world coalitions are engaged. Recognition of this fact is the basis of the world strategy of the United Nations. There would have been no Rome-Berlin-Tokyo Axis if not for the fact that the aggressor powers were keenly aware that victory must be won on a world-wide basis, or not at all.

Each of the United Nations took this general situation into consideration in planning its own contribution to victory. For the Soviet Union, this was not merely a matter of the disposition of forces, as for the United States and Great Britain. It was also a matter of the development of its own internal economy and population.

The Soviet Union alone had common frontiers with both German and Japanese-held territories. Where America fights from Australia and Britain from India, the USSR had to consider the situation in the Pacific from the viewpoint of an integral part of its own territory—the Soviet Far East. The Soviet Far East is less subject to consideration from a purely "Pacific" viewpoint than is any other of the lands on the western shore of that ocean. Neither its armed forces, its foreign relations, its economy or even the number of people by whom it is inhabited is a result of its own development. The history of the Soviet Far East as such is relatively little known for the very reason that it has been a function of Russian and Soviet history, except where foreign powers have left their imprint upon it.

What the Soviet Far East is today is understandable only in terms of Moscow's view of the situation in the Pacific in its bearing upon the future of the USSR as a whole.

The government of the Soviet Union was the first to feel the global threat of the Axis, and the first to adjust its foreign policy thereto. The emphasis in its internal economy was, accordingly, increasingly shifted to preparations for defense. For the Far East, this meant a dual policy of strengthening the economy of this distant region and of care to plan and distribute industrial

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developments in such a manner as to minimize the damage that could be done by a surprise attack.

The German invasion of the Soviet Union and the Japanese attack on Pearl Harbor intensified both aspects of its development. Industry, the fisheries and the agriculture of the Far East became a source of supply for the armies in Europe, while the degree of its expansion was determined by Soviet estimates of the potentialities inherent in the position of the USSR and Japan as members of opposition coalitions.

The most penetrating Soviet analysis of Japan's position and intentions after more than a year of war appeared in the Soviet counterpart of "Mission to Moscow,"—Ambassador Troyanovsky's book. "Why the United States Fights Against Hitlerite Germany." Troyanovsky indicates the Soviet's view of the contribution it had made to Allied victory in the Pacific. He makes the following analysis of Tokyo's reasoning in launching its attack against the United States:

> This time the Japanese militarists decided Hitler would be able to take Moscow and would thereby free the military forces necessary to move against Great Britain and the United States.
>
> Japanese military circles calculated that Germany, simultaneously with the offensive in the Pacific Ocean, would begin decisive military operations against the British Isles, then against the United States.[1]

Elsewhere Troyanovsky states that the German plan was to attack the United States through South America, whose Fifth Column was, in his opinion, underestimated in this country.

What Troyanovsky is saying is that the Soviet Union believes that its defeat of Hitler's 50 divisions at the gates of Moscow at the same time as the Japanese attack on Pearl Harbor, saved Britain, Latin America and ultimately the United States, from a Nazi invasion timed with a Japanese assault from the west and fifth column sabotage or uprisings from within. This is clearly the Soviet answer to the question of why Japan was so foolhardy as to attack America, and why Japan, thousands of miles from Europe, had joined the Axis and then established a policy of neutrality toward the Soviet Union.

If Troyanovsky is correct, there is a plausible explanation for Japan's failure to launch an all-out assault upon India or Australia: Nippon was saving its strength for bigger game to the East.

[1] *New York Herald Tribune,* March 29, 1943.

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The Soviet Union has stated its desire for continued neutrality vis-à-vis Japan. It feels that this neutrality is necessary in order finally to defeat Hitler and thus deprive Japan of the partner without which it cannot hope for victory. Its single-handed aid to China from the beginning of the Japanese attack in 1937, helped to prevent Japan from winning the Pacific War during China's four years of otherwise lonely struggle before Pearl Harbor. That neutrality means not only that Soviet forces in the Far East need not be replenished and supplied in active campaign, but that American Lend-Lease aid can continue to reach the Soviet Union without loss by submarine attack or aerial bombardment.

It is all these considerations taken together which determine Soviet policy in its Far Eastern areas. And there is one more.

The Soviet Union looks forward to a brisk and mutually-beneficial trade with China and other countries of the Pacific after the war, with Soviet exports of industrial machinery playing an important role in Asiatic reconstruction. Today these thoughts undoubtedly occupy a definitely secondary place in Soviet planning for the Far East. But they are there, and, what is more important, the basis of the industrial plant and transport system which will make them a reality is there. Thus consideration of the Soviet Union as truly part of the Far East rests not only on the military needs of the moment, nor on the simple geographical fact that Soviet territory lies north of the Amur, but also on the interplay of economies which will help finally to close the gap between East and West.

Soviet Central Asia is not as important to the United States as is the Soviet Far East, which borders upon the greatest lands of the Pacific and is a near oceanic neighbor to our Pacific Northwest. But Uzbekistan and its adjoining Republics form the single Soviet Asian territory other than the Far East which impinges directly upon countries important to us both for their trade and for their contribution to the stability—or instability—of the post-war world. And as a nation interested in seeing a satisfactory solution to the problem of India, we cannot but be curious about the means applied in the Soviet Union to eliminate the backwardness and hostility to Moscow which formerly characterized a region that extends to within nine miles of the Indian border.

The chapters on Central Asia, therefore, attempt to answer

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the questions indicated above within the limits of available knowledge. Since the recent progress of these areas has been a result primarily not of economic policy, as in the Far East, but of nationality policy, questions of recent internal history get much more attention than in the section on the Far East. And since exact economic data covering the revolutionary developments that have taken place in Central Asia during the war is not available, no effort has been made to present a detailed picture, in that regard. For the most complete pre-war data available, the reader is referred to "Land of the Soviets," by Nicholas Mikhailov, a Soviet work available in English, and "Soviet Asia," by R. A. Davies and Andrew Steiger.

The section of this study dealing with Soviet Central Asia makes no pretense at being a rounded treatment of its subject in the manner of the chapters on the Far East. The data for such an analysis is simply not available. Industrial enterprises have been evacuated to, and erected in Central Asia in such numbers during the course of the war as to have completely changed the basis of its economy. Refugees have been resettled en masse. They include not only Slavs, but large numbers of Jews, as well as persons from the Baltic states. As a result of the Soviet policy of safe-guarding not only cultural institutions, but the creative individuals who are the bearers of culture, these evacuees include a large proportion of scientists, artists, writers, the personnel of the motion picture industry, and the like.

As distinct from the Soviet Far East, which has felt the effects of the war mainly through its previously existing population and economy, Central Asia has thus had superimposed upon its pre-war status a vast new industry, basic changes in its agriculture and the impact of new and advanced cultures, on a scale which dwarfs the developments of the preceding decades of Soviet rule.

In Uzbekistan, largest of these Republics, the output of electric power doubled in the three years ending in April 1943. Yet industrial production increased so much more rapidly that a new group of hydroelectric projects had to be launched at that time. For reasons of wartime security, specific statistical data on the new industries of Central Asia, or even on the extent of the great new finds in natural resources prompted by the war, is not available. Nor is it known exactly how many refugees

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have come into this area. These events will have a permanent effect upon cultural, political and economic life in this area.

As a result, any attempt at a computation of the present industrial capacity of Central Asia and of the availability of Central Asian goods, after the war, to supply the nearby and ideal markets of the Near East, is at present impossible. Yet even before the war, the products of Central Asian industry were precisely those which the Near East will need when it begins to emerge from its age-old economic sleep. This was so for the simple reason that, in developing Central Asia, the Soviets bought the Twentieth Century to an area very similar to that embraced in the triangle Turkey-Egypt-Afghanistan.

The great Lend-Lease routes through Iran are, even today, used by Soviet doctors helping to eliminate malaria and Soviet Central Asian concert troupes performing in languages and cultural forms readily comprehensible to the people of that country. The city of Stalinabad, capital of the Soviet border republic of Tadjikistan, was in May 1943, the scene of an Afghan-Soviet conference on counteracting agricultural pests.

Soviet Central Asia is not, therefore, merely an exotic and hitherto remote corner of the USSR. True, it is geographically more distant from the United States than any other area of the Soviet Union. But it borders, and will certainly trade with, countries where Americans and American goods have become more widely known during the war than ever before. This trade, and an extension of the cultural intercourse that has already begun, cannot but cause deep thought among the peoples of the Near East as to the methods whereby the kindred nations of Soviet Central Asia have risen to a position not only of political and social, but of economic equality with the Russians for whom they were formerly a colony.

William Mandel

New York
September 1943

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THE SOVIET FAR EAST

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CHAPTER I

FORTRESS ON THE AMUR

When an All-Union Agricultural Exhibition opened in Moscow in the Spring of 1939, the Far Eastern Pavilion—designed to resemble a turreted fortress flanked by armed Frontier Guards—had on exhibit the products of prize farms within an area extending from the Amur to the Arctic, and from Lake Baikal to the Pacific. Irkutsk Oblast (generally translated as Region, but actually comparable, administratively, to a State in the U.S.A.), which lies just to the west of Baikal, was also represented. In a speech delivered at about the same time, K. I. Kachalin, head of the Communist Party in that Oblast, defined the economic function of his district as being that of a strong rear for what he frankly called the "Far Eastern Front."[1]

In short, the Soviet Far East is that portion of the USSR which borders on Japanese-held territory and the Pacific Ocean, plus those areas the economic development of which has consciously been directed to provide a base for the armies stationed on that frontier. After Hitler's attack on the USSR, these areas joined the rest of the country in producing for the armies of the west. As a result, they became more closely integrated with, and necessary to, the national economy as a whole than was previously the case. This had the effect of strengthening the Soviet desire to remain at peace with Japan until Hitler is defeated, while the growth in Far Eastern war production increased ability to resist a Japanese assault.

Let the reader imagine Canada and Alaska from Lake Superior to the Pacific facing that ocean from the Asiatic, instead of from the American continent, and he will have a fair idea of the dimensions, population and industry of the Soviet Far East. In place of the ports of Vancouver and Prince Rupert, there

[1] Until the German invasion, the Soviet equivalent of the American Corps Area was known as a Military District, or, in the case of those along the western borders, a Special Military District. The single exception to this rule was the area for which the two Separate Red Banner Far Eastern Armies were, and are, responsible. This area was and is simply termed the "Far Eastern Front."

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are Vladivostok and Nikolaevsk-on-the-Amur; in place of Lake Superior—which marks western Canada off as a distinct economic and geographic unit—Lake Baikal. But Canada's southern border west of the Great Lakes is a purely artificial line running due east and west. The terrain on one side of the border is no different from that on the other. The Soviet borders in the Far East, on the other hand, follow natural lines of demarcation. The frontier with Manchuria is roughly a huge semicircle bulging northward. The border itself is marked for over two thousand miles—almost its entire length—by the Argun, Amur, and Ussuri Rivers. Along the diameter of the semicircle is the Chinese Eastern Railway, running in a straight line from Chita to Vladivostok across Manchurian territory. This railroad was built by Russia and was owned by the USSR until 1935.

West of the point where the Chinese Eastern meets the line from Chita, the Soviet border marches with the territory of the Mongolian Peoples' Republic, with which the USSR has an effective Pact of Mutual Assistance.[2] From this point westward and southwestward for thousands of miles to Iran, the frontier runs largely across mountain peaks.

For six months each year the Ussuri, the Argun and the mighty Amur Rivers form a natural barrier. During the rest of the year they are frozen highways. From the western end of the border with Manchuria down the river to the Autonomous Jewish Oblast (Birobidjan), a distance of roughly two-thirds the length of the border, the Japanese-controlled bank is higher and rises steeply to plateau and mountain country. Below the confluence of the Bureia and the Amur there is a short stretch of mountain on both sides at Khabarovsk and south along the Ussuri the border runs through marshy lowlands. East of the Ussuri the land rises sharply to the peaks of the low Sikhota-Alin range along the coast of the Japan Sea. Although the land slopes northward from the Amur and becomes nearly impass-

[2] Active Soviet military assistance to Mongolia was last extended in 1939, when Japanese forces of considerable strength were prevented, in fighting of several months' duration, from biting off a section of the Mongol Republic which forms a deep salient into Japan's left flank. Mongol assistance to the USSR in the present war has consisted of livestock products and manufactures, sheepskin coats, boots and saddleware, woolen hats and clothing.

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able mountain country within a hundred miles of the frontier, neither these mountains nor the Sikhota-Alin offer natural protection against a Japanese attack anywhere between Tygda, near the northernmost point on the frontier, and Vladivostok; for the cities, farmlands, railroad and highways, and all but a fraction of the population are in the fifty-to-a-hundred-mile-wide valley between the Amur and the mountains.[3] Of the four-and-a-half million persons living east and north of Lake Baikal in 1939, nearly four million live along the railroad or between the railroad and the river. The latest and best map of the Soviet Far East, dating from 1939, designates rivers only fifty miles from the railroad as "unexplored." The situation may best be compared with that which existed in the United States a century ago, when the Mississippi was both highway and axis of settlement.

North of the Trans-Siberian to the Arctic there is an almost unbroken wilderness. Roads suitable for motor vehicles are hundreds of miles apart. The only inland settlements of importance are at the gold-diggings along the Kolyma River and on the Aldan, the Vitim and other headwaters of the Lena. The Okhotsk Seaboard, the island of Sakhalin and the peninsula of Kamchatka also have sizeable towns. Yakutsk, capital of the Yakut Autonomous Soviet Socialist Republic, which is as big as all of European Russia, has a population of fifty thousand.[4] Aldan (formerly Nezametnyi), largest gold-mining town on the Aldan, the Russian Klondike, has thirty-thousand inhabitants. The highway from Bolshoi Never, northernmost point on the Trans-Siberian, to Tommot on the Aldan River beyond the town of Aldan, was extended in 1943 to Yakutsk, 750 miles from the railroad.

Administrative Divisions.

Administratively, the organization of the Soviet Far East would seem to be based on a number of considerations. First,

[3] The Japanese, on the other hand, have concentrated their industries around Mukden, five hundred miles from the closest point on the Soviet border. These industries are fully comparable to those which the USSR has built in the Far East. For a Soviet estimate of these industries, see A. Ziuzin, "O Polozhenii v Manchzhurii," *Mirovoe Khoziaistvo i Mirovaia Politika,* Nos. 4-5, 1940.

[4] *Pravda,* December 10, 1940.

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there is the criterion of nationality.[5] The area as a whole falls within the territory of the Russian Soviet Federated Socialist Republic because the Russians are numerically predominant in the Far East. However, in the area immediately to the east of Lake Baikal, the Buriat-Mongols, rapidly being knit into a modern nation, form half the population and are organized as the Buriat-Mongol Autonomous Soviet Socialist Republic. Three-quarters of the inhabitants of the Lena River Basin are Yakuts, a Turkic people forced northward centuries ago. This area, facing to the north and having no railroad connection with the rest of the country, is organized as the Yakut Autonomous Soviet Socialist Republic. In its isolation from the rest of the Union, Yakutia can be considered the Alaska of the USSR. It is more properly part of the Arctic than of the Far East.[6]

Aside from the above-mentioned autonomous republics, the administrative divisions begin on the west with Irkutsk Oblast, comprising most of the western shore of Lake Baikal, the basin of the Angara and the headwaters of the Lena River, a section of the railroad in that area and the economically important highways leading from the Trans-Siberian to the Lena. Chita Oblast is the mountain and plateau country between the eastern limit of the area of heavy Buriat-Mongol population and the beginning of the fertile Amur plain. It includes a section of the frontier with Manchuria. It is cattle and mining country. Stra-

[5] Economy, population, strategy, and convenience of administration would seem to have been the major factors in determining the other administrative boundaries in the Far East. In the early years of Soviet rule, the former territory of the Far Eastern Republic, from Lake Baikal to the sea, was organized as the Far Eastern Province. Everything west of the lake was Western Siberia. As Siberian economy developed and its administration became more complex, there appeared the Far Eastern and the East Siberian Territories. The Far Eastern Territory included the entire Soviet-Manchurian border, the coast from Vladivostok to the Bering Straits with its islands and peninsulas, and the hinterland of both these areas. Eastern Siberia included everything from Chita westward to the basin of the Yenisei (the economy of which is now linked with that of Kuzbass, rather than with the Far East). Later, Eastern Siberia was further subdivided into the Krasnoyarsk Territory (the Yenisei Basin, beyond the scope of this study), the Irkutsk Oblast, the Buriat-Mongolian Autonomous Soviet Socialist Republic (which had existed since 1923 within the borders of Eastern Siberia), and the Chita Oblast. The Far Eastern Territory was subdivided in 1938 into the Khabarovsk and Maritime Territories. The Yakut ASSR has been a separate entity since 1922.

[6] A conference of Far Eastern Communist officials reported in *Pravda* on October 24, 1942, was attended by representatives of all the districts listed here except Yakutia.

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tegically, it presents a single problem, the defense of, or attack along, the railroad connecting the Trans-Siberian and the Chinese Eastern. During the numerous campaigns of the Civil War and the Intervention, the railroad to Chita was a favorite route of invasion.

Khabarovsk Territory comprises the Amur Valley, the coast of the Sea of Okhotsk, Kamchatka Peninsula, the Soviet-owned northern half of the island of Sakhalin, and the Chukot Peninsula facing Alaska—in sum, the Pacific Seaboard. It has the largest population of any administrative area in the Far East and is only slightly smaller than Yakutia. On it falls the task of safeguarding the open Amur Valley and the railroad running through it, which still remains the only connection between the center of the USSR and its ports facing Japan, as well as the responsibility for protecting the 9,000-mile shoreline (2,000-mile airline) from the mouth of the Amur to the Bering Strait, entrance to the Northern Sea Route through the Arctic, and of maintaining free access to the open Pacific from Petropavlovsk-on-Kamchatka. A special problem is presented by the defense of the Soviet half of Sakhalin, rich in oil and coal.

The Maritime Territory has the peculiar distinction of facing Japan on two of its three borders. This Territory consists of the southeasternmost portion of the USSR. It forms an inverted triangle with its apex at Vladivostok. One point of the base is at Sovetskaia Gavan on the Sea of Japan, and the other is near Khabarovsk where the Ussuri flows into the Amur. (Khabarovsk, itself, is the capital of the Territory of that name, and does not fall within the limits of the Maritime Territory.) The Maritime Territory is divided into the Ussuri and Maritime Oblasts, with the line of separation running along the ridge of the Sikhota-Alin. The Ussuri Oblast would be defended by the Army, most of the Maritime Oblast by the Navy and its marines.

The Northeastern Seaboard.

The northeastern seaboard consists of four main administrative and economic districts, all part of Khabarovsk Territory, governed from the city of Khabarovsk, but supplied primarily from Vladivostok in the Maritime Territory facing Japan. Southernmost of the four districts is the Sakhalin Oblast, comprising the Soviet half of the island. Sakhalin is famous for its oil and supplies the bulk of Soviet output in the Far East. Ex-

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ploitation of these fields has increased so rapidly during the war that in 1942 the USSR had to make use of river vessels and barges to carry the petroleum to the mainland in addition to the ocean-going ships normally used. Japan extracted probably an equal amount before the war, on the basis of long-term concessions secured as the price of Japanese withdrawal of troops which had occupied the Soviet half of the island until 1925. Sakhalin coal, too, is important to the economy of the Soviet Far East, and its timber resources are now being exploited. Soviet and Japanese fishing vessels lay their nets offshore, as they do everywhere in the Okhotsk Sea and along the Pacific shore of Kamchatka, with the exception of areas prohibited for military reasons.[7] Okha, a port town of 17,000[8] on the northeast coast, is open the year-round. Hundreds of miles closer to the mainland than Petropavlovsk-on-Kamchatka, Okha is linked by a very short rail line to Moskal-vo, oil port on the west coast, which is blocked by ice six months in the year. Capital of Sakhalin Oblast is Alexandrovsk, seaport on the west coast, with a population of 18,000 in 1937. (By way of comparison, be it noted that Juneau, largest town in Alaska, had a population of only 5,700 in 1940.) Soviet Sakhalin as a whole has a population somewhat larger than Alaska's 73,000.

On the mainland opposite Moskal-vo is the port of Nikolaevsk-on-the-Amur, a town of 15,000 in 1937. Nikolaevsk is the capital of the Lower Amur Oblast, which embraces the coast of the Okhotsk Sea from the mouth of the Amur to the port of Okhotsk. The only other town of importance is the port of Aian. Both Okhotsk and Aian are closed by ice during more than half of each year. Their connections with the interior are very poor.

Centered at the twin towns of Magadan and Nogaevo on the northwest shore of the Okhotsk Sea is a newly opened region of such importance that it is administered directly from Khabarovsk. While the size of the population of Magadan is not known, its relative magnitude may be surmised from the fact that its two newspapers, which serve the gold-mining hinterland as well, have a combined circulation of fifty thousand per issue. A first-class highway, the only one along the entire seaboard,

[7] Japan utilizes these fishing grounds under the terms of the Portsmouth Treaty concluding the Russo-Japanese War of 1904. See *North Pacific Fisheries* by Homer E. Gregory and Kathleen Barnes, American Council, Institute of Pacific Relations, 1939.

[8] 1933, probably much larger today.

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runs inland for several hundred miles to the navigable headwaters of the Kolyma, which flows north to the Arctic.

The Kamchatka and Chukot Peninsulas are organized as the Kamchatka Oblast. This region faces the open Pacific, here called the Bering Sea, as distinct from Sakhalin and the other Okhotsk Sea areas which are within the span of the Japanese-controlled Kuril Islands. Although fishing is the main industry, there is a rapidly increasing number of oil wells on the coast north of Petropavlovsk, and coal is mined both on the Pacific and Okhotsk coasts. Petropavlovsk, with a population of twenty thousand in 1937, is the largest town.[9]

The regions described above have a total population of about a quarter of a million. As they are linked to each other, and to the railheads at Komsomolsk and Vladivostok only by sea, they are regarded as a single economic unit, centered at Nikolaevsk-on-the-Amur.[10] In addition to the development of the fishing industry, which supplied thirty per cent of the entire USSR catch in 1940,[11] they are of importance to the country as a whole in that they produce gold and furs, commodities which the United States has received in payment for war supplies.[12] In recent years, successful efforts have been made to develop local sources of fuel for shipping. Attempts to develop agriculture in order to decrease dependence upon shipments from the mainland also have succeeded. However, food, machinery, and manufactured goods are still imported. Shipments from the west coast of the United States—of grain, oil, and machines—have enabled the young industries and farming districts centered at Komsomolsk and along the Trans-Siberian to concentrate on strengthening the Soviet's Far Eastern frontier and its active armies in Europe.

[9] *Tikhookeanskaia Zvezda* reported 20,000 participants in the November 7 celebration of 1939, indicating a population considerably larger.

[10] XVIII Sezd Vsesoiuznoi Kommunisticheskoi Partii (b). Stenograficheskii Otchet, p. 140.

[11] Including catch in the Japan Sea off the coast of the Maritime Territory.

[12] Soviet efforts to meet increased foreign commitments resulting from the war have been reflected also in increased activity in the Far Eastern gold fields. Thus, *Trud* reported on September 23, 1941, that many gold mines had already turned out the output planned for the entire year.

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CHAPTER II

NATURE AND NATURAL RESOURCES

The Moscow strategists have had it amply demonstrated by the history of the last forty years that the tremendous coastline curving northward from Vladivostok must be safeguarded by the strongest naval forces that can possibly be built and maintained in Far Eastern waters. Soviet land frontiers in that area must be guarded perhaps even more vigilantly. These forces must be supplied and maneuvered along a single railroad which runs within fifty miles of the border for almost the entire length of a two-thousand-mile frontier.

This critical situation has been met by a rapid—or, as the Russians would say, a forced—development of the economy of the region. During the Second Five-Year Plan, capital investments in the Far East approximated those expended upon the far more widely publicized projects in Western Siberia, such as the Kuznetsk coal and steel center.

Development of the Far East has served two purposes, military and socio-economic. In the first place, it has provided the Soviet's armed forces in the Far East with a small but complete and by no means negligible industrial base. During the war it has produced armaments on an increasing scale for the European front. Secondly, it has served to place at the disposal of the entire Union the natural resources of its Far Eastern Territory. For instance, fish from this area provided 30 per cent of the country's requirements in 1940. Lastly, it has begun to serve as an outlet for the surplus population of the crowded farming regions of Central Russia and has thus helped to raise the standards of living, both of those who migrated and those who remained.

Huge as is the territory stretching northward and eastward of Lake Baikal, little was known of its riches when the Soviets began to administer it. True, for three hundred years gold, furs, and skins had been taken by unscrupulous trading with the natives. Equally unscrupulous exploitation of the exiles and convicts with whom the Tsar's police had liberally populated

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the area provided salt and some iron.[1] Timber stood in an almost unbroken forest from the border to the beginning of the Arctic tundra, hundreds of miles to the north. Fish were so thick in the rivers and the coastal waters that gulls were, and are, known to stand on the backs of shoals of salmon while they pecked for their dinner. These resources did not have to be sought out. They were evident to the naked eye. But the development of an area as large as the United States requires more than fish and timber. Iron ore, coal, oil, non-ferrous metals, non-metallic ores; these are but a few of the essentials to the creation of an integrated industry. And they had first to be found.

Intensive prospecting has resulted in the discovery of virtually every raw material requirement of modern industry. At present, the known natural riches of the Far East sound almost like a list of the chemical elements. As can be seen from the district-by-district recapitulation which follows, they are so distributed as to make possible the elimination of long railway hauls of all but a very few natural raw materials.

The Sikhota-Alin range which follows the coast of the Japan Sea from Vladivostok to Sovetskaia Gavan contains coal, iron, graphite,[2] manganese, gold, tin, lead, zinc, and silver. Timber and raw materials for the glass and cement industries are also available in large quantities. Thus, within a region no larger than the State of Washington, there are available raw materials for construction, and for the steel, chemical and machine-building industries. It is hardly necessary to point out that armaments and munitions are largely made from the same raw materials.

Khabarovsk Territory to the north and west of the Maritime Territory has not yet been fully explored. But within reach of the railroad, navigable rivers or the sea, there are oil—on Sakhalin, Kamchatka, and the lower Amur[3]—iron ore, molyb-

[1] In the 1880's one out of every three persons in Irkutsk Gubernia was an exile.

[2] The wartime overloading of the Trans-Siberian Railroad has thrown the Far East on its own resources. By the end of November 1941, a cement building-block plant in Vladivostok had been converted to the refining of graphite formerly hauled from west of the Urals. And by April 1942, a brand new plant for the refining of that ore had been built and was in operation.

[3] *Moscow News* reported on October 10, 1941, that prospecting parties sent out after the outbreak of the war had completed mapping of the oil and salt deposits of the Aian Maisk region north of Nikolaevsk on the shores of the Okhotsk Sea.

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denum, manganese, coal and peat—on Sakhalin and Kamchatka[4] as well as at various points on the mainland—and gold. Here, too, all the prime requirements of the steel industry are to be found in close proximity to each other, and this industry has been established.

Chita Oblast, west of Khabarovsk Territory, is the largest tin-producing region in the country and the second largest producer of gold. It also is engaged in the large-scale mining of molybdenum, tungsten, arsenic, fluor-spar from the largest beds in the Soviet Union, lead, and iron ore and coal in close proximity. Iron and steel are being manufactured here as well.

Buriat-Mongolia, next region to the west, has oil and copper near Lake Baikal, asbestos, diamonds, combustible shales, and the other resources found almost everywhere in this region of fabulous natural wealth—tungsten in large quantities, gold, iron, graphite, molybdenum, and raw materials for the cement and glass industries.

Irkutsk Oblast, situated to the west of Lake Baikal, has limitless water power potentialities. They are estimated at twenty million kilowatts. The largest power plant now in existence, our American Grand Coulee, is rated at one-tenth that capacity. The coal fields at Cheremkhovo, just southwest of the lake, are the largest in the Far East, having estimated reserves of one hundred billion tons, 4.7 per cent of the total for the USSR. Iron ore nearby has made possible the establishment of another steel center. Huge deposits of gypsum and mica provide other materials not found elsewhere in the Far East. Salt mines, if further developed, could fully supply a commodity essential to the Pacific fisheries and not available to the east of Lake Baikal and within reach of the railroad except in the ocean waters. The deposits are now estimated at thirty billion tons. Bauxite found in this area makes possible the development of an aluminum industry. Chlorine and bromine, along with sulphuric acid which can be derived from gypsum, and coke from Cheremkhovo coal, can serve as the basis of a complex chemical industry.

The all-but-isolated Yakut Republic in the basin of the Lena has the most recently discovered, the least developed, and possi-

[4] *Pravda* reported, April 21, 1942, that the west shore of Kamchatka, formerly dependent on coal hauled by sea from Sakhalin, was now utilizing its own peat deposits, after the perfection of means of artificial drying necessary in its exceptionally damp climate.

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bly the richest resources in the Far East. A tin refinery—which may already be in operation—has a capacity larger than the total production of that essential metal in the USSR in 1939. Gold-mining here is a large-scale modern industry. Oil has been found wherever it has been drilled for in a line running for a thousand miles north of Lake Baikal. Here, too, there is enough salt to supply the entire Far East. More than one hundred different occurrences of coal have been discovered, with reserves estimated at fifty billion tons. And iron, which can be mined by open-cut operations, has been discovered near the city of Yakutsk. Platinum, zinc, nickel, tin, silver and precious stones are among the other valuable minerals found in the altogether 360 known occurrences of mineral wealth.

Climate.

When the Far East had been sufficiently well prospected for the planning of large-scale economic development to begin (although very often these processes took place simultaneously), the Soviet authorities were faced with three limiting factors of major importance. First and most spectacular is the factor of climate. The influx of settlers and the development of industry and even agriculture demonstrate that the climate of the Far East is not an insuperable obstacle. But it is certainly not a factor to be ignored.

Russia is a cold country, but the area northeast of Lake Baikal and inland from the Okhotsk Sea is the coldest region on earth. It cooks, or rather, freezes the weather for the entire Soviet Far East. The only exceptions are the little tongue of land extending down to Vladivostok, and the eastern shore of Kamchatka, which is warmed by the Japan Current.

With these exceptions, the entire Territory is one in which the temperature at Khabarovsk may be taken as typical for the populated districts. There, the January average is six below zero Fahrenheit, twenty degrees lower than at Moscow! In 1942, the Amur was opened for navigation from Khabarovsk to points north (downstream) on May 6. It had been closed since the end of the previous November. This was not an unusual year. Frosts of fifty below are not unusual. At Verkhoyansk in Yakutia the average January temperature is −58° F!

Russians are hardy folk. The climate of the Far East was, in itself, not enough to keep them away, although it has hardly

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been an inducement. But until science learned how to make crops grow in this region where the ground never thaws to a depth of more than a few feet, and where frosts come sooner, stay longer and are more bitter than anywhere else on earth, no farmer could make a living except in the basins of the Ussuri and the Amur below Tygda. More important, as these valleys remain the chief farming region, the number who can produce for the market even there and the quantity of their surplus are definitely limited by the climate-determined maximum yield per acre. In recent years, the yield has shown a steady increase, and the degree to which the Arctic has been conquered is indicated by the fact that a collective farm, located in the Verkhoyansk area where the temperature is above the freezing point only seventy-four days of the year, has obtained grain (wheat) yields of more than ten centners per hectare[5] for four years running—a yield slightly higher than the average in the United States for the last twenty years. The war has served to spur such developments. Methods of farming on the northern fringe of the settled area improved so rapidly that in 1942 spring sowing in the valley of the Zeia, in Chita Oblast just below the Yakut border, was completed five weeks earlier than during the preceding year. Winter rye was sown there in the fall of 1942 for the first time in history. It was planted on the southern slopes of hills and on special plots guarded by windbreaks. During the same year, the first fruit and berry nursery was successfully established at the Skovorodino Frozen Soil Station in the same area. The nursery was the result of the previous establishment of an orchard which bore in 1942 the first crop of apples, grapes, and raspberries ever to ripen in the zone of perpetually frozen soil.

While food could be, and was, transported from the west to feed the builders of the new industrial cities, it was clear that an economy in the planning of which military security was a prime factor could hardly be built on the basis of a two-thousand-mile food haul along a frontier railroad. Nor could this economy fulfill its other role, that of helping to raise the industrial output and living standard of the entire country, as long as the expense of transporting so bulky a freight as foodstuffs had to be balanced against the region's contribution to the national econ-

[5] 14.7 bushels per acre. *Vsesoiuznaia Selskokhoziaistvennaia Vystavka, 1939.* Ogiz., Moscow, 1939.

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omy. Moreover, the rail line itself is limited as to the amount of freight it can carry, and military and industrial freights have, of necessity, to take a large part of its capacity.

Climate, then, limits both agriculture and population in the Far East. Moreover, it limits the function of the most vital single branch of the economy of this far-flung region—transportation. Rivers are frozen for six months each year in the southern portion of this area, and for eight or nine months in the north.[6]

The suspension of river transportation for half the year is compensated for, to a small extent, by the fact that numerous country roads freeze so solidly as to become suitable for truck transportation. However, the enormous distances of the Far East make this form of supply extremely expensive as a replacement for long-haul water transport, while the cold creates technical problems of which we got an idea when the mechanized German war machine bogged down in the winter of 1941 in the much milder climate of European Russia. Furthermore, large-scale truck transportation requires commensurate supplies of gasoline and other petroleum products.

Not even the railroad is free of the effects of the climate. Frozen subsoil eliminates natural drainage over huge areas, with the result that surfaces are frozen so solidly that they must be blasted for construction to proceed during the winter and become endless expanses of morass during the summer. It has required the development of special and expensive means of construction to avoid a repetition of the experience of the Murmansk railroad, rushed to completion as a supply route during the first World War, long stretches of which sank into the bog each summer, until it was thoroughly rebuilt a few years ago. The problem of drainage and water supply affects not only railway building but the functioning of the line as well.

[6] For maritime transportation, see pp. 20-23.

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CHAPTER III

TRANSPORTATION

The chief difficulty with transportation is not the climate but the system itself. There simply is not enough of it.

Railroads.

Earlier, the Soviet Far East was compared to western Canada. The comparison fails if transport be taken as a criterion. A railway map of Canada shows a network denser than that of the western portion of the United States. So dense is it, in fact, that the question of how to dispose of unnecessary and unprofitable lines has for some years been a lively political issue there. Could some of the railroads in question be moved to the Soviet Far East, lock, stock and barrel, both sides might be able to congratulate themselves on a good piece of business!

When the Soviet Government began the intensive development of its Far Eastern region in 1928, the transport facilities consisted of a one-track railroad and a run-down river fleet. The Chinese Eastern Railway was still owned by the USSR at that time, but it served only Vladivostok and Khabarovsk. Its usefulness was soon impaired and later disappeared altogether as the Japanese moved into Manchuria.

The Trans-Siberian has since been double-tracked and greatly improved. Between Khabarovsk and Vladivostok there are said to be three tracks. Heavier equipment from ballast to engines is now in use. "SO" tender-condenser locomotives, which make possible lengthy runs between stops for water and help to eliminate the serious difficulties caused by the need for piping and heating water during the six months' winter, are now standard equipment. The introduction of the automatic block system, with automatic couplings and brakes on trains, has also helped to increase the traffic capacity of the line.

New branch lines have been built, of which the most important known to have been completed is the 220-mile link northward, down the Amur from Khabarovsk to Komsomolsk. The railroad from Ulan-Ude to Kiakhta and, possibly, to Ulan Bator

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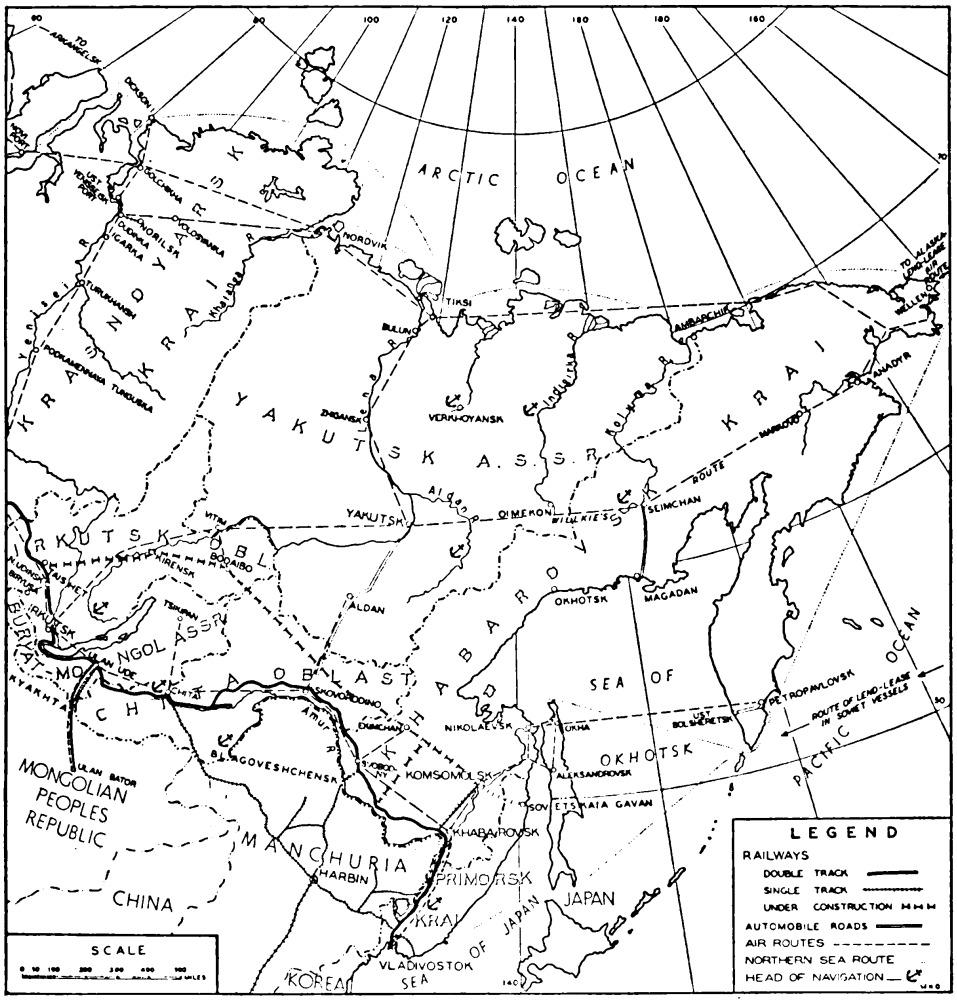
in Outer Mongolia, is of considerable economic and military importance. In September 1940, there was announced the completion of a 102-mile branch line running north from the Trans-Siberian along the Bureia River to the newly-established town of Tyrma in the rich coal and ore mining region of the Maly Khingan range. There have also been persistent reports from non-Soviet sources of a line of similar length north of Rukhlovo.



Tyrma is on the route of the much-discussed Baikal-Amur Trunk Line, the northern Trans-Siberian. One of the great, and very serious, contemporary mysteries of the East is the degree to which this railroad has been completed. When it is finished, transport in the Soviet Far East will be as invulnerable as it is geographically vulnerable today. The BAM runs through, and north of, the mountains flanking the Amur Valley. Mineral re-

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sources of great importance will be tapped by this line. New timber lands will be opened for exploitation; and as they are cleared, additional farm land will come into use. Yakutia will be brought closer to the rest of the country, as the BAM is to run north of Lake Baikal and to cross the Lena and several of its large tributaries at points where they are navigable. The area between the Trans-Siberian and the BAM, which is to be crossed by a number of connecting lines, most of which are already supposed to be in operation if only as feeder lines for the construction of BAM, will become populated. New cities will rise. The center of population will move away from the frontier.

These are definite plans. Difficult and ambitious as they may be, they are not impossible of realization. Nor do they pertain to a future so distant as to be remote from the problems of today. Even while they are plans, they exercise an influence on world affairs, for they tempt action on the part of the Japanese to prevent them from coming to fruition.

How far have these plans progressed? The Third Five-Year Plan, 1938-1942, called for the completion of part of the BAM line, but did not specify which part. The plan also called for the construction of certain new industries away from the Trans-Siberian. Chief among them were the iron, coal, and molybdenum mining developments along the upper reaches of the Bureia. Although the branch lines from Tyrma and Komsomolsk, respectively, to the Trans-Siberian, enable these raw materials to reach the Komsomolsk steel mills by an indirect long haul, there is every logical reason to deduce that the 300-mile section of the Baikal-Amur line from Komsomolsk to Tyrma has been completed or is nearing completion. The development of the port of Sovetskaia Gavan during the Third Five-Year Plan would also give reason to believe that the section of the BAM connecting that city with Komsomolsk has been placed in operation. Likewise, the line along the Amur may already have been continued northward to the port of Nikolaevsk. Certainly, the defense of the oil and coal of Sakhalin, and of the Soviet coast on the Sea of Japan, would be rendered considerably less difficult by the completion of both of these lines, and particularly by the line to the Japan Sea at Sovetskaia Gavan. Certain it is, however, that the plans for a railroad from Nikolaevsk to circle the Okhotsk Sea have never got past the drawing board, if indeed they have reached that stage.

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West of Lake Baikal, it appears that no portion of the Lena Railroad from Taishet on the Trans-Siberian to Kirensk on the Lena northwest of the lake or to Bodaibo on a tributary northeast of Baikal has been finished.[1] Finally, there have been no indications that the huge and difficult main line of the BAM proper from the Lena to Tyrma has been built or was to be built by now. It is to be remembered that the war has hit the Soviet steel industry harder than any other, and the building of a railroad of this length requires steel in large quantities. This fact, taken in conjunction with the direct statement in the Five-Year Plan that only part of the line was to be placed in operation, indicates that the Trans-Siberian was, as late as 1943, the single major transport link between the Far East and the USSR west of Lake Baikal.

Roads.

Serviceable roads link all major cities in the Far East. Generally, these roads follow the railroad and relieve it of short-haul freight. In time of war, this would be an advantage, should service on the railroad be disrupted by aerial bombardment. But should sections of the line be captured, the roads would be broken as well. The main highways are those from Vladivostok to Khabarovsk, Khabarovsk to Komsomolsk, and the Far East section—insofar as it has been completed—of the cross-continental road from Moscow to Khabarovsk.[2] There are also highways running northward from Magadan on the Okhotsk Sea, and from the northernmost point on the Trans-Siberian to Yakutsk. The quality of these main roads may be judged from the

[1] A news item in *Pravda* a few days before Hitler invaded the USSR reported that chicks for the workers in the Bodaibo gold fields—northeast of Lake Baikal—were still being shipped all the way from Irkutsk by air. It is further to be noted that according to the Second Five-Year Plan, Vol. 2, p. 501, the construction of the 784 km. Lena Railroad was only scheduled to begin in 1937. Its cost was estimated at fully 40 per cent of that of the 1,800 km. BAM. Finally, there was a report in *Pravda*, as recently as November 2, 1942 reporting that a trainload of gifts from Yakutia to the troops at the front was moving by rail from Irkutsk, indicating beyond question, that these supplies had had to be shipped to the Trans-Siberian by river and road.

[2] The *Pocket Atlas of the USSR*, 1940, does not show either the Khabarovsk-Komsomolsk road or any portion of the Moscow-Khabarovsk road in the Far East as complete. Neither does the larger and more complete sectional map of the USSR published in 1939 by the Chief Administration of Geodesy and Cartography of the Council of Peoples' Commissars.

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report, more than six years ago,[3] that the newly-completed five-hundred mile highway from Vladivostok to Khabarovsk could be traversed by a passenger car in eighteen hours and by a truck in thirty. The distance and the mountain terrain are very similar to those on highways between New York and Cleveland, and as the time required to make the trip is the same, the road is evidently comparable to a first-class highway in the United States. The economic importance of the highway system of the Far East may be inferred from the same report; it said that on the section between Vyazma and Voroshilov, not yet complete, local trucking turnover had reached 5,000 tons per day. Everywhere in the Soviet Union, truck transport has multiplied many times since then.

The highway to Yakutsk is the last link in the single truly invulnerable means of communication with the Far East. Freight can come to Yakutsk either over the Northern Sea Route from Archangel and up the Lena—a three-thousand mile trip requiring trans-shipment at the mouth of the Lena—or down the Lena from Ust-Kut or Kirensk, to which it is brought from Irkutsk by truck. For nine months of the year, the Northern Sea Route is not in operation, however, and the amount of freight that can be carried during the hundred-day season is a fraction of what the railroad can handle. The rest of the year trucks can be used on winter roads north of Lake Baikal; but here, too, the capacity of the railroad cannot be approached.

North Pacific Sea Routes.

In March 1943, the U.S. Lend-Lease Administration revealed that the North Pacific was a primary supply line to the Soviet Union. At that time, nearly one-third of all American shipments to the USSR were being sent in Soviet vessels from our West Coast to ports in the Soviet Far East. While convoys to Murmansk were being attacked by submarines and by bombers from Norwegian and Finnish bases, Lend-Lease supplies were moving across the North Pacific without loss as a result of the Soviet-Japanese Neutrality Pact.

War between the Soviet Union and Japan would make the use of this route practically impossible because it passes between the main islands of the Japanese Archipelago. However, alternative routes exist. The best of these is from Petropavlovsk to

[3] *Pravda,* November 4, 1935.

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the railhead at Komsomolsk-on-the-Amur, via the Okhotsk Sea. Here two difficulties present themselves. First is the fact that Komsomolsk and Nikolaevsk, a port near the Amur's mouth, are both blocked by ice for half the year. Second is the fact that this route passes through the Japanese-owned Kuril Islands.

Both difficulties can be overcome in an extremity. Okha, the new port on the northeastern tip of Sakhalin, is open the year round. During the months when the Amur ports are closed, supplies received at Okha can be transported overland to the west coast of Sakhalin, over the solidly frozen ice of the Straits of Tartary—at one point only five miles wide—and by land to Komsomolsk. The entire distance from Okha to Komsomolsk is only two hundred miles. As for trucking over the ice, this is a common procedure in the Soviet Union, and was utilized most recently to supply Leningrad during the winter of 1941-1942, when all land routes were in German hands and an ice road over Lake Ladoga saved the city.

The Kuril Islands passage can be avoided by trucking freight landed at Petropavlovsk over an existing road across the narrow southern end of the peninsula to the port of Ust-Bolsheretsk on the Okhotsk Sea. Furthermore, the very fogs which until recently precluded shipping to Petropavlovsk would make it possible to run vessels through the widely-scattered passages among the Kurils.

It was during the winter of 1940-1941, on the very eve of Hitler's invasion of the USSR, that meteorological difficulties were overcome to the point of enabling regular winter freight transportation to be established between Vladivostok and ports on both coasts of the Kamchatka Peninsula.[4] Until that time, the almost continuous fogs and storms prevalent in the area during the winter, plus drift ice, had isolated Kamchatka from September to May.

Port capacity at Petropavlovsk is considerable. That portion of the Northern Sea Route fleet which serves the eastern section of the Arctic is normally stationed there during the winter. A floating dock of 5,000 ton capacity was installed in 1939 to enable these vessels to be overhauled without sending them to the ports on the Japan Sea. (Vladivostok and Sovetskaia Gavan have docks of similar design and capacity. The military importance of all three is obvious.)

[4] *Trud,* March 22, 1941.

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During the three summer months supply vessels can proceed directly from Seattle or Canadian ports to Archangel by way of the Arctic. The distance is six thousand miles, less than half the length of the Indian Ocean route to Iran, and but a fifth longer than the Boston-Archangel route. On the eve of the war, the USSR had over a hundred vessels regularly plying the Northern Sea Route. Through the use of aerial ice reconnaissance, coordinated reports from more than fifty weather stations on the Arctic coast, mechanized dock facilities at brand-new ports, and powerful icebreakers, navigability has been greatly increased. Until 1932, it took two summers, with the intervening winter spent locked in the ice, for a vessel to make a trip from Archangel to Petropavlovsk-on-Kamchatka. Today, after a decade of development, the same ship can make two round trips in a single season. Thus, the average speed is no less than that of vessels traveling in convoy in ice-free latitudes. While no statistics of Arctic freight shipments have been issued since 1938, year-to-year percentage-of-increase data [5] make it possible to estimate that no less than a million tons of supplies can be shipped from the west coast of the United States to Archangel during a single summer, if necessity so require.

Shipping Facilities.

A chain of new ports and landing quays has been built all along the Soviet's 9,000 miles of eastern coastline. Five-thousand-ton floating docks have been installed at Vladivostok, Sovetskaia Gavan and Petropavlovsk-on-Kamchatka. Large shipyards have been built at Komsomolsk and Vladivostok, and smaller ones at Petropavlovsk, Nikolaevsk and several other ports on the Pacific, and on the Okhotsk and Japan Seas. These improvements have revolutionized ocean shipping in the Soviet Far East. They have also given the naval and merchant fleets great recuperative powers. Climate still restricts ocean shipping to half the year or less north of the Japan Sea. In 1942, navigation through the Straits of Tartary between Sakhalin and the mainland opened on April 23, after having been closed since

[5] Andrew Steiger, "Arctic Supply Line," *American Review on the Soviet Union,* February-March 1942. Also, P. Shirshov, "Novy Etap Raboty Sevmorputi," *Sovetskaia Arktika,* December 1940.

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late in November. The port of Nogaevo (Magadan) on the north shore of the Okhotsk Sea opened only on June 27 for a four-and-a-half months' shipping season.

While highway and railroad are laboriously laid over mountain and swamp, the airplane provides regular communication with the most distant sections of the Far East. True, the increase in freights to be carried and the improvement in means of transportation enabling larger and cheaper shipments has relegated the plane to a minor position in the economy of the Far East. But transports of five- and ten-ton capacity still serve the outlying districts, and emergency shipments are still made by plane even along the rail line. In time of war, the sturdy equipment and the experience accumulated in fifteen years of regular freight service, the most highly-developed in the world, could play a considerable role in providing food, machine parts and other necessities to temporarily isolated communities.

Air Services.

Air services are also used to link the Soviet East with Alaska. One means of saving shipping space is that of flying freight and aircraft over the North Pacific. The routes to be followed were previously in regular commercial use by both countries, except for the small, easy over-water hop from Nome, Alaska, to the existing Soviet airfields at Wellen, Providence Bay, Anadyr, Markovo, or Seimchan. A regular airline from Seattle to Juneau has been maintained since May 1940, while Alaska itself had at that time 175 planes in commercial service, operating from 121 airfields, including emergency landing grounds. Comparable statistics for the Soviet Union's northeastern seaboard are not available, but regular airlines from the very tip of the Chukot Peninsula opposite Alaska operate in three directions: along the Arctic coast, along the Pacific and Okhotsk coasts, and directly overland to Yakutsk on the Lena and Irkutsk on the Trans-Siberian Railroad. Wendell Willkie returned from his flight to the USSR and China by this route. Both the Soviet and the American airfields are spaced at intervals that make possible the use of this route by planes of the shortest operating radius.

Despite all improvements, transportation in the Far East can

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still be spelled in one word—the Trans-Siberian.[6] As a result, the beginnings of industry and agriculture in the vast spaces north of the railroad may make good newspaper copy, but they must remain only pioneering efforts until rail lines can be run north to serve them. Before the war, the largest goods carrier to Yakutia, the Republic of the Lena Basin, was the Northern Sea Route. But the total tonnage carried by that route to the mouth of the Lena in 1940 was less than the *daily* freight on the least used section of the Trans-Siberian! However, there are signs of important change. It was reported in *Trud,* October 5th, 1941, that Lena River shipping was 70 per cent above plan. A year later, *Pravda* reported that the amount of grain being shipped out of Irkutsk Oblast via the Lena and the Angara Rivers during that year all but equalled the amount shipped by rail. This probably indicates that Yakutia is now being fed by grain from the Far East, which formerly depended upon imports to fill out its own needs. It may also indicate the shipment of some grain to the European North via the rivers to the Arctic and the Northern Sea Route.

Communications

The integration of the Far East with the life of the rest of the country depends upon its system of communications by post and telegraph. Some idea of the difficulties faced and the methods used to overcome them can be gotten from statistics for the huge and sparsely-settled Yakut Republic. 3,500 reindeer, 1,200 horses and 1,000 dogs are numbered among the "employees" of its postoffice department, which also uses planes, trucks and motorboats by the hundred. 206 post-offices are needed to serve the population of 400,000 scattered through the gold fields, fisheries, lead-and-gold mining regions and farms of this Arctic region. Pack animals deliver the mail during the spring thaw, when cars cannot leave the single highway. Maintaining telegraph lines is a deed of heroism under circumstances where a single line stretches 900 miles through an uninhabited sub-Arctic Forest in a country where winter means incredible blizzards and 60 below. But it is done.

[6] An indication of measures taken to enable rapid movement in roadless areas in case of war was the characteristic report in *Tikhookeanskaia Zvezda,* February 15, 1940, that a group of motorcyclists had made the 200-mile trip from Komsomolsk to Nikolaevsk in sixteen hours.

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CHAPTER IV

POPULATION AND LAND SETTLEMENT

The lack of adequate transit facilities in the Far East limits settlement and industrialization of that area. When in the fall of 1939 Marina Raskova, an outstanding Soviet aviatrix, had to parachute from her plane within a hundred miles of Komsomolsk after a non-stop flight from Moscow, she wandered through swamp and forest for ten days without meeting a living soul or finding a trail to follow. The area in which it was possible for her crew to set down their plane without being spotted by inhabitants of the locality was so great that it was a week before they were sighted, although fifty planes were searching for them. As for the areas farther north and farther inland, it need only be pointed out that the population of the Yakut Republic, which is as large in area as all of European Russia up to the Urals, numbers less than half a million, approximately the same as that of the single city of Stalino in the Donets Basin. The population of the entire Soviet Far East, when the Soviets undertook to develop it, was little larger than that of Chicago. And that population lived in the narrow strip of territory between the border and the railroad.

Old Resident Groups.

A few of the people who lived between Irkutsk and the Pacific at the time of the census of 1926 were descendants of the Cossack freebooters who conquered the area in the seventeenth century. A large number sprang from the Cossack clans settled by the government along the fertile banks of the Amur and the Ussuri to garrison the frontier. Others were the children or grandchildren of exiles. But most of the inhabitants of the Far East in 1926 could tell of the days between the turn of the century and the outbreak of war in 1914 when they or their parents had traveled eastward in unheated freight cars graciously provided for land-hungry, and just plain hungry, peasant pioneers. Most of their companions had died of hunger or cold before their

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house was up or their first crop in—if in the hostile conditions of this strange new land they got any crop at all. Others had returned home or died on the way back.[1] Those who remained and who survived the Russo-Japanese War, the World War, the Civil War, and the Intervention, formed the tough and intensely loyal core of railwaymen and peasants around whom the new Far East was to be built.

In addition to the Russians and Ukrainians who formed the groups described above, native peoples and oriental immigrants inhabit the Far East and the Eastern Arctic in about the same ratio to the total as are the Negroes to the population of the United States. Chief among these are the Buriat-Mongols and the Yakuts, each numbering about three hundred thousand. A number of minor peoples and tribes total another sixty thousand in number. With the exception of the Buriats, the native peoples live entirely in the Arctic or the forested hinterland north of the railroad. The thirty thousand Chinese, of varied backgrounds, and the one hundred and eighty thousand Koreans,[2] largely refugees who immigrated after their country was seized by Japan in 1910, live in the cities and the farming country along the railroad.

All these minority groups were plundered mercilessly under the Tsars. For their furs and hides, the native people got cheap manufactures in small quantities, and large doses of liquor and social disease. Education and medical services were virtually unknown. Only 0.7 per cent of the Yakuts and 4 per cent of the Buriat-Mongols were literate before the Soviets came to power.[3] Before the Revolution, there was one doctor for every twenty-five thousand inhabitants in Yakutia and for every 13,000 square miles of territory.[4] Moreover, these peoples either had no written language or, as in the case of the Buriats, a complex and archaic script understood only by the lamas. They were literally dying out. Twenty-two famines occurred within fifty years in North Yakutia in the last century. In the twenty years prior to the Revolution of 1917, the female population of the Olekmin

[1] M. Sonin, "Resettlement of Population during the Third Five-Year Plan," *Quarterly on the Soviet Union,* November 1940.

[2] Official Census Returns, *American Quarterly on the Soviet Union,* November 1940.

[3] *Vsesoiuznaia Selskokhoziaistvennaia Vystavka, 1939,* OGIZ, Moscow, 1939.

[4] *Sovetskaia Yakutia,* by G. Kolesov and S. Potapov, Sotsekgiz, Moscow, 1937.

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district of Yakutia fell by 16 per cent.[5] The Orientals fared little better. They were tolerated only as cheap labor. When they desired to rent land, it was granted them on terms of almost feudal bondage.

The Revolution brought equal rights in economic, political and social life. But the low level of education, language difficulties, and the nomad hunting economy of the native peoples presented important obstacles to their rapid involvement in the development of the Soviet Far East. Rather was it the development of the Far East by Russians and Ukrainians that brought with it the emergence into civilized life of the native peoples, as a result of what Vice-President Wallace has called the "ethnic democracy" practiced in the USSR.

As has been indicated, the population of the Far East had been built by spontaneous migration of landless peasants. After the Revolution, this source of population increase disappeared as a result of the distribution of land to the peasantry. Only 450,000 people moved to all of Siberia between 1925, when planned resettlement was first undertaken, and 1929. This is approximately the same as the number of those who had migrated spontaneously *each year* between 1906 and 1913.

Planned Settlement.

With the beginning of large-scale development under the Five-Year Plans, efforts to increase the population of the Far East were directed along two main lines. Many workers for construction and industry were secured on the basis of an appeal to their social conscience.[6] When it was decided to build a major industrial city on the lower reaches of the Amur, more than two hundred miles from Khabarovsk, the Young Communist League was called upon to provide volunteers to do the job. Early in 1932, the first four thousand arrived at the site of the future city. Since that date, Komsomolsk—the name is taken from that

[5] N. Mikhailov, *Land of the Soviets,* Lee Furman, New York, 1939, p. 173.

[6] The heightened sense of social responsibility of persons who have come to, or have remained in, the Soviet Far East because they knew it to be a danger point for their country has evidently had a salutary effect on the region's economic life. Thus, it was reported in *Trud,* March 23, 1941, that demobilized Red Army men who had participated in the fighting against the Japanese at Lake Khasan were working as lumberjacks in Khabarovsk Territory. They were the outstanding Stakhanovites of the lumber industry and regularly turned out three to four-and-a-half times the required production per man.

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of the youth organization which built it—has grown to at least seventy thousand[7] and was to reach three hundred thousand by the end of 1942, making it the largest city in the Soviet Far East.

The construction of Komsomolsk was only the most spectacular of a number of similar projects. By 1937 these new towns had become sufficiently habitable to think of them in terms of establishing a permanent population. In that year, Khetagurova, wife of a Red Army commander stationed in the Far East, issued an appeal to young women to come to the Far East. More than 50,000 answered her call, and some five thousand came before the year was up. They have been coming in increasing numbers ever since.

As for material incentives, it is to be noted that the wages of workers and professionals in the Far East have, since 1933, been from 20 to 30 per cent higher by law than in the rest of the country. Red Army men and non-commissioned officers get 50 per cent more than they do elsewhere, and commissioned officers 20 per cent more.

In 1940, a responsible Soviet economist, M. Sonin, urged that the further stimuli of tax exemption and still higher wages in force for workers in the Arctic be extended to the Far East, in order to secure the much larger number of workers needed to operate the plants and transport facilities scheduled to go into operation by the end of 1942.[8]

By 1939, the measures already taken had resulted in trebling the urban population of the Far East by comparison with that of 1926. The figures for the largest cities and towns are indicative of this growth:

TABLE I

POPULATION INCREASE, 1926–1938

	December 1926	*January 1939*	*Increase Per Cent*
Irkutsk	108,129	243,380	125.1
Vladivostok	107,980	206,432	91.2
Khabarovsk	52,045	199,364	283.1
Ulan-Ude	28,918	129,417	347.5
Chita	61,526	102,555	56.7
Komsomolsk	Not in existence	70,746	
Voroshilov	35,344	70,628	98.8
Blagoveshchensk		58,761	

[7] 1939 Census.

[8] M. Sonin, *loc. cit.*

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Since the 1939 census, the population of Yakutsk has passed the 50,000 mark.[9]

Six hundred thousand additional industrial workers were to be needed in enterprises going into operation by the end of 1942 in the Far East and Krasnoyarsk Territory. In effect, when account is taken of differences in labor productivity, this means that it was planned to add to the industry of this area a capacity equivalent to that of the powerful industries of the city of Cleveland. Of this number, two-thirds were to be provided by the internal population resources of the districts in question. It is probable that the bulk of these were to be construction workers trained as machine operators, while only a minority were to come from the farms.[10] This, at least, would seem to follow from the fact that in the Khabarovsk and Maritime Territories alone, farm acreage was to increase by thirty per cent during the Third Five-Year Plan, and detailed plans to encourage agricultural resettlement had been worked out.

Agricultural settlement in the Far East has been encouraged by important material benefits since the end of 1933.[11]

An article in *Pravda* on July 6, 1939, expanded further on these benefits. The Agricultural Bank provides traveling accommodations, food, and medical service during the trip, without cost to the settler. Empty houses at the place of settlement (these were to be found in areas where local farmers had left to work

[9] *Pravda,* December 10, 1940.

[10] The war brought to the Far East, as to every other part of the Soviet Union, increased requirements of skilled labor. In 1940, Labor Reserve Schools were organized throughout the Soviet Union. Originally, only boys were admitted to these boarding schools. Although no public announcement of change of policy had been made, it was reported in *Trud* on August 2, 1941, that 50 per cent of the students in the Khabarovsk school were now girls. As the male students had all been below the draft age, it is to be assumed that this figure represents at least a doubling of the total number enrolled. Thus, the needs both of industrial expansion and of replacements for men called up to the army would be provided for.

[11] "Back taxes are cancelled, and for a period varying from five to ten years, depending upon individual circumstances, they are freed from payment of the agricultural tax, the tax for cultural purposes, and compulsory delivery of grain and certain other products. They may turn in personally owned grain, fodder, potatoes and cattle at their point of departure and receive equal quantities of the same upon arrival at their ultimate destination. They also receive free food and seed grains. Further, sections of state- and district-owned forests are set aside for charcoal-making. When available, new homes and stables are given them (free of charge), and long-term credits are extended for all necessary repairs and improvements." M. Sonin, *loc. cit.*

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on construction projects or in industry) were given to the settlers free of charge, together with a free gift of as much as two thousand rubles for repairs. In the majority of cases, of course, houses were not available. Here home building loans ranging up to eight thousand rubles were granted. Except in Irkutsk Oblast, where conditions of repayment were not quite as liberal, one-half of this "loan" was a free gift; the rest was to be repaid over a period of fifteen years, starting the fourth year after the house is occupied. In addition, farmers with no cows of their own (this refers to milk-cows for the use of the family, and not those which are the property of the collective), were entitled to a five-year credit for the purchase of one cow, half of the sum being a free gift. Lastly, a long-term loan of from three hundred to one thousand rubles for the purchase of household goods, furniture, or equipment was made to the settler.[12] Red Army reservists desiring to settle in the Far East received an outright gift of five hundred rubles for household needs.

Despite these inducements and the enormous stretches of land belonging to collectives in the Far East, agricultural resettlement went very slowly until 1939. Between 1926 and 1939, the rural population of the Far East and Krasnoyarsk Territory increased by 17.5 per cent, while the population of the country as a whole increased by 15.9 per cent. In short, the rural increase in the East resulted almost entirely from the natural growth of the population with new settlers no more than replacing those who had gone into industry. The explanation would seem to be that the Soviet farmer had got used to what is described as a relatively "refined" existence and, with the rising living standard provided by his collective, had little desire to expose his family to the rigors of pioneering. Beginning in 1940, it was arranged that heads of families precede their dependents in coming to new settlements, and that provision be made for the welfare of their families during this period. Under this arrangement, the families were not to be sent for until homes had been built. However, planned rural resettlement in all of Siberia in

[12] A news item published in *Trud,* September 10, 1941, sheds an interesting light on the attitude of the settlers who have come to the Far East with the aid of government loans. It was reported from the border *raion* (county) of Nerchinski Zavod in Chita Oblast that 29 collective farms in that county, owing 203,000 rubles in loans repayable in 1941, had, by that date, actually turned in 301,000 rubles. The 50 per cent excess payment represented advance repayment of loans due in 1942, and in one case, in 1943!

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1940 was to reach only 140,000 persons—35,000 families. 1941 was to see the arrival of "much larger" numbers. The great migration caused by the war has chiefly affected Central Asia and Siberia, rather than the Far East, where proximity to the border would seem to render inadvisable the mass resettlement of refugees. However, the city and probably the entire Oblast of Irkutsk, nine hundred miles from the border of Manchukuo, would seem to have been chosen as a major center of wartime resettlement. It was reported in *Pravda,* May 21, 1942, that in this city, whose total population had been a quarter of a million in 1939, there were now 204,000 workers having their own individual or collective truck gardens. This would indicate a population, including children, of 400,000 or more. Furthermore, 47 new restaurants, plus six for children and one reserved for the use of persons requiring special diets, were opened in Irkutsk Oblast in 1942. Likewise, there was considerable housing construction.[13] Another news item,[14] reporting the formation of a new raion (county) as a result of the growth of the population of the Nerchinskii Zavod and Byrkin raions on the very border of Manchuria in Chita Oblast indicates that mining and agriculture are being expanded, at least to some extent, wherever natural conditions permit, the Kwantung Army to the contrary notwithstanding.

[13] *Izvestia,* November 17, 1942.
[14] *Ibid.,* December 9, 1942.

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CHAPTER V

CULTURAL DEVELOPMENT

The Soviet Far East is pioneer country. But pioneering in the Soviet Union is unlike pioneering anywhere else. Although Irkutsk, with more than a quarter of a million people, had no streetcars, sewage system, or water works in 1939, it could boast no less than nine higher educational institutions with a total enrollment in excess of five thousand. None of these establishments had been in existence when the Bolsheviks came to power in 1917. Irkutsk is an extreme case, having fewer municipal improvements and more colleges than any other city in the Far East. The newer cities—Irkutsk is in existence since 1661—and those such as Ulan-Ude and Khabarovsk which have grown so rapidly as to have required reconstruction from the ground up, are models of town planning. Hospitals, theaters, libraries, and recreation centers have gone up simultaneously with mine tipples or metal works. Elsewhere in the Soviet Union it is possible to compare the facilities for education and public health with those existing before the Revolution. But in the Far East there is no basis for comparison because these things simply did not exist.

Education.

In 1939, practically every child of school age, even in the most distant reaches of the Far East, went to school. The following table shows the relatively large proportion of students who continue their education beyond the elementary grades and the generous provision made for adult education.

It would seem that every effort has been made to maintain educational standards in wartime. Thus, when it was found necessary to set up needle trades, boot and shoe, carpentry and knitgoods workshops in the Khabarovsk schools late in 1942, in order to manufacture and repair consumers' goods for the city's population, it was specified that the children be taught these trades outside of regular school hours.

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TABLE II

EDUCATIONAL INSTITUTIONS IN SOVIET FAR EAST, 1938–39[1]

1. Elementary Schools

Region	Number of schools	Number of Pupils Total	Number of Pupils 5th–10th yr.	Pupils p. 1000 of pop. All	Pupils p. 1000 of pop. 5th–10th yr.
Maritime Territory	850	142,600	43,700	157	48
Khabarovsk Terr.	1493	198,300	58,800	139	41
of which, Jew. Obl.	107	16,600	5,200	153	48
Irkutsk Oblast	1538	239,200	65,300	186	51
Chita Oblast	1158	180,400	45,200	156	39
Buriat-Mongol ASSR	523	90,300	22,800	167	42
Yakut ASSR	439	55,000	15,100	137	38
USSR AVERAGE				185	60

2. Higher and Adult Education

Region	Number of Students in Techn. [a] Sch.	Higher [b] Sch.	Adult [c] Sch.	Community Centers [d] Population served No.	by each C.C.
Maritime Territory	3,300	1,400	3,100	26	3,172
Khabarovsk Terr.	5,200	1,500	6,900	605	2,365
of which, Jew. Obl.	600	...	600	41	2,644
Irkutsk Oblast	5,900	5,200	6,800	903	1,425
Chita Oblast	2,200	100	4,600	806	1,439
Buriat-Mongol ASSR	1,600	500	2,100	428	1,267
Yakut ASSR	2,300	200	1,400	298	1,344
USSR AVERAGE					1,639

[a] Technical and other special secondary schools.
[b] Higher educational institutions.
[c] Adult elementary and high schools.
[d] Actually called "clubs", usually community centers in the American sense; also called "houses" or "palaces" of culture, according to size and facilities; often open to workers in a given branch of industry, or to soldiers, and members of their families.

Along with schools, camp facilities for children have been developed in this pioneer region. From Khabarovsk Territory alone, 35,000 children were to be sent to summer camps in 1941,[2] and 1,400 to open-air sanatoria, while another 11,000 were to be cared for in day camps in the cities. As the total population of the three cities in the territory, having over 50,000 population each, was about 350,000, the proportion of children who were to receive the benefits of these institutions was to be high indeed.

In 1913, Vladivostok had the only higher educational institution east of Tomsk, three thousand miles away. This had a student body of 145. In 1939, every city with more than 50,000

[1] From *Kulturnoe Stroitelstov SSSR,* Gosplanizdat, Moscow and Leningrad, 1940.

[2] *Trud,* April 11, 1941.

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population, except new-born Komsomolsk, had at least one college. The Soviet Union has not found it necessary to curtail the activities of its higher educational institutions to any noticeable degree. Thus, on October 3rd, 1942, *Izvestia* carried the following dispatch from Irkutsk:

> The new school year began yesterday in the 12 technical High Schools and 7 higher educational institutions of this city. The State University of Eastern Siberia is better prepared to serve its students than ever before, as important scientific figures have been placed in its various chairs. Having gained a wealth of practical knowledge by work in the factories and fields during the summer, the students are better prepared to make use of the knowledge they have acquired. More than 100 of them spent the summer in geological parties. More than 50 served as tractor and combine operators on collective farms. The first day of the school year augurs well for the future. Attendance of students, professors and instructors was complete and all classes operated on schedule.

TABLE III

HIGHER EDUCATIONAL INSTITUTIONS IN SOVIET FAR EAST 1938–39[8]

City	*Number*	*Enrolment*
Vladivostok	4	1431
Blagovehchensk	2	438
Irkutsk	9	5183
Ulan-Ude	4	508
Khabarovsk	4	1018
Chita	1	83
Yakutsk	2	225
	26	8886

In addition to the adult schools and community centers already named, other institutions for adult education and recreation are numerous. There were in 1939 more movie houses in proportion to population than in the country at large. The number of books in public libraries was equal to the population (Irkutsk Oblast not included)—four and a half million. The number of libraries would seem to show that the smallest permanent settlement was not without one.

One of the most striking developments of cultural institutions for industrial workers is contained in a report of the Gold and Rare Metals Miners' Union, the membership of which is largely concentrated in the Far East. In April 1941, this union owned 210 community centers, 325 sound-film projectors, 120 radio

[8] *Kulturnoe Stroitelstvo SSSR, op. cit.*

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TABLE IV

CULTURAL FACILITIES IN SOVIET FAR EAST, 1938–39[4]

	Public Libraries				*Movie Theaters*				
	Books								
	No.	*No.*	*per 1000 of pop.*	*Museums*	*Theaters*	*No.*	*Pop. per Th.*	*Sci.[a] Inst.*	*Newspapers*
Maritime Territory	196	708,100	781	2	4			8	68
Khabarovsk Terr.	507	1,209,400	845	8	12	666	1,362	14	152
of which, Jew. Obl.	39	121,500	1,121		1			1	9
Irkutsk Oblast	555	1,401,700	1,089	5	8	270	4,766	8	71
Chita Oblast	393	691,000	596	4	4	287	4,040	1	75
Buriat-Mongol ASSR	180	343,000	633	3	4	90	6,024	5	30
Yakut ASSR	92	87,700	219	4	4	92	4,353	4	23
USSR AVERAGE			861				5,513		

[a] Scientific institutions, affiliates, and experiment stations.

loud-speaker installations, 264 stationary and 1300 traveling libraries. Thirty years ago, the fathers of these miners were shot down in cold blood when they petitioned not for community centers but for wage increases. Five hundred were killed and wounded in this incident, which has entered the history of the country as the "Lena Massacre."

Despite the strain placed on the energy and resources of the people of the Far East by the need to establish local economic independence while increasing production for the armed forces, means have been found to hold up the standard of living and the cultural services to the population. According to *Pravda,* Moscow's famous Theater of Satire spent the 1941-42 winter season in Vladivostok, while the Leningrad New State Theater was in Khabarovsk. The Buriat fishermen of Lake Baikal were brought information on the war by a special motor boat fitted out with a movie projector and carrying a portable exhibition and printed matter. Simultaneous with their efforts to replace long-haul raw materials for industry, the people of Ulan-Ude had found the time to plant seven thousand trees along its streets to beautify the city, according to a report in *Izvestia* for April 29, 1942.

A newsreel studio began shooting in Vladivostok in February 1942, with a schedule of two pictures monthly. The first of these was to deal with the spring planting. At the same time, a projection crew was touring the remote regions of Khabarovsk Territory with a repertory of the most recent feature products of the major Soviet studios. Stalin's heartening speeches of No-

[4] *Kulturnoe Stroitelstvo SSSR, op. cit.*

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vember 6 and 7, 1941, were delivered by plane to distant native settlements. The bicentenary of Vitus Bering's famous voyage of discovery was celebrated in Vladivostok with the opening of a special exhibition.

Other Welfare Provision.

Significant for enterprises of undoubted practical importance is a report that a new lying-in hospital has been built at Alexandrovsk on Sakhalin, that a new boarding-school for the children of hunters and fishermen has gone up at Nikolaevsk on the Amur, that a hospital of fifteen beds has been erected in the village of Troitsk between Khabarovsk and Komsomolsk, and that new schools have been opened in nearby Kurun and Slavianka.[5]

The city of Yakutsk, 750 miles from the railroad, previously dependent upon that overland haul for its medicines, celebrated the opening of its own pharmaceutical plant in March 1942. After the war had been in progress for five months, distant Magadan, cut off for eight months in the year from all but aerial contact with the outside world, opened a new hospital with therapeutic, gynecological and surgical departments, X-ray and other necessary laboratory equipment. It even had a blood-bank, deposits in which could be flown to the fighting front in a matter of days along the regular air lines.

Most impressive is a report from Komsomolsk on the first anniversary of Soviet entry into the war. Since the date of Hitler's attack, there had been built two high schools, thirty-six kindergartens, several dozen new apartment buildings, a number of cultural institutions, and a large "factory kitchen"—an enterprise for the cooking of thousands of meals daily to be served in its restaurant or to be delivered hot to the home. Cattle were grazing and workers were tending their kitchen gardens where there had been virgin forest a year before.

These material and cultural advances have been continued, not out of complacency or bravado, but because they are felt to be necessary to the prosecution of the main business at hand—the winning of the war. That this is understood not only by the leaders but by the people of the Far East as well is indicated by reports of popular movements in which material incentives play no part, for they often involve direct sacrifice.

[5] *Trud,* February 28, 1942.

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Popular Movements of War Relief and National Defense.

There can be no question of the fact that, when Hitler attacked, the people of the Far East not only felt the war five thousand miles to the west to be theirs, but understood that they might, at any moment, have to defend themselves against Hitler's Japanese ally. In addition to those called to the colors, thousands not yet liable for service clamored for instruction in military skills. Four months after the outbreak of war, *Izvestia* reported that three hundred Khabarovsk youths had completed voluntary training in the operation of machine-guns from motorcycles, and that hundreds more were now enrolled. Shortly afterward, it was announced that four hundred and seven skiing stations were to be opened in the cities and rural districts of Khabarovsk Territory, and a city ski school in Komsomolsk for training instructors. Tens, if not hundreds, of thousands, learned how to ski during that winter, as if to demonstrate the rapidity with which a citizen soldiery could be mobilized from the most distant reaches of this far-flung region. The season wound up with a thousand-mile relay race involving more than 2,000 skiiers. The distance was covered in eight days.

In the same category was a dispatch of *Izvestia* reporting that 2,320 railwaymen had passed the remarkably stiff tests of all-round athletic and military prowess required to earn the badge "Ready for Labor and Defense." Likewise, 200 girl students at Khabarovsk Teachers' College took regular nursing courses in their spare time, and now take turns on duty in the city's hospitals after school hours.[6]

When the Red Army, advancing westward in its winter offensive, found the people of the reoccupied areas stripped of everything but the clothes on their backs, a nation-wide movement for relief to the sufferers sprang into being. Shoes and clothing donated by the school children of Sakhalin, Kamchatka, Kolyma and Khabarovsk for the children of Kalinin Oblast were sufficient to fill two railway cars. Later, the youth of Khabarovsk Territory collected 616,000 items of children's wear to be sent to the west. The young people of thinly-populated, sprawling Yakutia sent in another 68,000 pieces of clothing. A year later, the people of far Kamchatka, who had already made many gifts, were raising funds to outfit a squadron of hospital planes.

[6] *Izvestia*, November 29, 1942.

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Farmers set up a joint receiving center for gifts of agricultural produce to the army and to the people of the reoccupied areas. In the first eleven months of the war, the farmers of the Maritime Territory donated 1,000 head of cattle, 6,000 fowl, 17,000 bushels of grain, 650 tons of potatoes and vegetables, and 100,000 quarts of milk. In the spring of 1942, the collective farms of the Territory planted 2,500 "defense acres," whose entire produce would go to this cause. In the fall of 1942, there arose a movement for a nation-wide contest for the best and most output in each field of the national economy to honor the 25th Anniversary of the Bolshevik (October) Revolution. The effect of this patriotic movement in spurring farm efficiency is indicated by the following news item from *Izvestia,* October 25, 1942:

> Sretensk, Chita Oblast. The collective farmers of the Amur Valley have begun a mutual check on each other's pledges in the pre-October Competition. Yesterday about 100 leading farmers of three collectives—gang leaders, and managers of their livestock subdivisions, gathered at one of the farms to check the quality of that farm's work by visiting the first acres sown to winter grains, the threshing floors and the haystacks. Having fulfilled ahead of time most of their pledges in connection with the Anniversary, the Amur Valley farmers will complete the threshing and sale of grain to the state by November 7th (the Anniversary of the Revolution—W.M.). Every member of these farms will donate 15 liters of milk from his cow for the troops at the front by way of a present, on the occasion of the Anniversary.

Although the mobilization order of June 22, 1941, did not affect the Far East, press reports make it clear that later calls to the colors have taken probably as large a proportion of men from that area as from any other part of the country. There is every indication that these men have been used to reinforce the European front, rather than the forces standing along the Amur and the Ussuri, although there can be little doubt that these, too, have been strengthened. During this war it has become customary for the folks back home to send bulk gifts to units of the Army. Very often gifts from a given area go to units composed largely of men from that area. Thus it is interesting to note items such as that in *Izvestia,* April 14, 1942, reporting that the Yakut Republic had sent off presents enough to fill a freight train of twenty-one cars to the troops of General Boldin, one of the heroes of the winter's counteroffensive. Included among these gifts were gold watches made from ore from the

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Aldan fields, to be presented to outstanding warriors. The attitude of the people toward the war effort is most clearly demonstrated in the following summary of Yakutia's part in the war, in *Pravda,* November 2, 1942, written by a Yakut official:

The peoples of Yakut ASSR, like the whole Soviet people, have risen in arms to defense of their Socialist homeland. Today, for Yakuts, there is no more worthy cause than to aid their own Red Army by every means in their power to destroy the German Fascist occupationists.

The Yakut people have been able to lead a good life only as a result of the victorious October Socialist Revolution. That great son of the Russian people, Chernyshevskii, justly called pre-revolutionary Yakutia an enormous jail without bars. Yes, under Czarism Yakutia was nothing but a huge jail, and that not only for the exiles, the best people of the Russia of those days, but for the Yakuts themselves. This huge country concealed within its depths gold, tin, coal, oil, and other natural riches. They remained imprisoned in the soil, their productive forces enchained. The Yakut people were condemned to economic and cultural backwardness.

Only the great October Revolution freed the Yakut people, and opened for it the road to a free and happy life.

Under the leadership of the party of Lenin and Stalin, with the brotherly aid of the Russian people, the Yakuts built a brand new Socialist industry, and collective and state farms which are the universal system of agriculture within the Republic. In Yakutia a culture, national in form and socialist in content, is developing in all its scope. Yakutia has something worth defending from the Hitlerite plunderers.

The working people of Yakutia answered Stalin's call to give all the people's strength to the destruction of the enemy, as behooves Soviet patriots.

Tens of thousands of the best sons of the working people of the Republic are now at the fronts. The Yakuts—Red Army men, officers, and political workers are fighting gloriously against the German invaders, not begrudging their strength or life itself. In the course of the war for the Fatherland many Yakuts have been decorated with Orders and medals for their courage, bravery, and feats of initiative. To beat the Fascists, wherever they are met, to do so accurately without missing as Yakut hunters shoot a squirrel through the eye—this is the guiding star of the Yakut Red Army men, professional hunters by background.

It is a long way from the lower reaches of the Lena to Moscow but Moscow is dear to us; it is close to the heart of every Yakut. Dear to us too are the sunny Caucasus, the City of Lenin, the steppes of the Don, the Ukraine and heroic Stalingrad, which are beating back the ferocious attack of a cunning enemy with such self-sacrifice. All this is ours, all this is our homeland and for its freedom, for its happiness, the best sons of the Yakut people are bravely fighting side by side with Russians and with all the other brother peoples of our great country.

There is the collective farmer from the Gornii Raion of the Yakut Autonomous Soviet Socialist Republic, Red Army man Stepan Kobrov who in a single battle on a front near Moscow wiped out 16 German

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tommy-gunners. There is that remarkable sniper, that courageous and fearless soldier of the Red Army, Dmitrii Guliaev, a collective farmer from Viliuiskii Raion who already has 70 notches in his rifle. The former secretary of the Yakutsk City Committee of the Communist Party, comrade Feshchuk has been decorated with the Order of the Red Banner for his military services in active duty. A school teacher from Niurbinsk, Red Army man Bushkov, has wiped out 19 Germans since he has been at the front. The well-known mortarman Bochkarev, the former secretary of the village Soviet of Opset in Ust-Aldan Raion annihilated some dozens of the enemy in a single battle.

Some of the best sons of the Yakut people have met the deaths of heroes in defense of the honor and freedom of their homeland. Among them was the former Secretary of the Anabar Raion Committee of the Communist Party and Deputy to the Supreme Soviet of the Yakut Autonomous Soviet Socialist Republic, comrade Gorokhov.

The feats of Yakut warriors at the front inspire those at the rear. The people of Yakutia, although 4800 miles from the front, are as one with the whole country and the entire Soviet people. The workers of the Aldan, Dzhugdzhur and Verkhoian have but a single slogan: Give the Country Ever More Gold and Tin! And truly the working men and women of Dzhugdzhur and Veerkhoiansk (Ege-Khaia) have already given to the country hundreds upon hundreds of pounds of valuable metal over their quota. And the Soviet Government has decorated the best Stakhanovites and innovators with the highest honors. The famous Dzhugdzhur miners, Valentov and Lytkin systematically turn out three to four days work in one.

Many large enterprises including the tanning and leather-goods factory, the Lena Waterways, the central power station and others, systematically fulfill and overfulfill their planned quotas of output.

There is a broad movement of Socialist competition in honor of the coming Twenty-Fifth Anniversary of the October Revolution among the workers, collective farmers and fishermen of the Republic. September, the first month of the pre-October competition, demonstrated what inexhaustible possibilities there are to overfulfill our production quotas. For example the large gold-mining trust "Dzhugdzhurzoloto" considerably overfulfilled its September plan and had completed its scheduled plan for the entire year by October 3rd. The Dzhugdzhurtsy have promised to produce hundreds of kilograms of gold beyond plan. For the third consecutive month the "Dzhugdzhurzoloto" Trust has emerged victorious in the competition of workers in the non-ferrous metals industry.

Many enterprises in the category of industries of local importance have also attained remarkable results in the competition. The most important enterprise of the city of Yakutsk—The Yakutsk Central Electric Station—is working well. Its labor force has considerably cut the cost of electric power, saving some 200,000 rubles in the course of a season.

Many collective farms and farmers can also celebrate the Twenty-Fifth Anniversary of the Great October with remarkable achievements. The collective farms "Lenin's Science" of Niurbinsk Raion, the "Motor" collective farm of Lena Raion and many others have already completely filled

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their quotas of grain deliveries to the state and have paid in full their rent in kind to the Machine & Tractor Stations.

The Lena Waterways are also working well. The steamer, "Ten Years of the Yakut Republic," completed its plan of navigation for the year by October 1. (The river is open for navigation until October 30 at Yakutsk, October 20 at Bulun and November 6 at Olekminsk—W.M.). The steamer crew saved 290 cubic meters of firewood and 120 pounds of grease, and was the winner in the All-Union Socialist competition, receiving the prizes given by the All-Union Central Council of Trade Unions and the People's Commissariat of Inland Waterways of the USSR. At a meeting of the Lena River men, comrade Teterin, the captain of this vessel, declared: "We have undertaken the following obligation in the pre-October competition, to greet the Twenty-Fifth Anniversary of the Great October Socialist Revolution with a gift in the form of production —and even greater fulfillment of our freightage quota."

What is the "secret" of these foremost enterprises and collective farms? The "secret" consists of the fact that they were able to transform the fierce hatred which Soviet people bear towards the enemy into concrete deeds. These enterprises and these collective farms hum with the self-sacrificing labor of true patriots ready to fill any order of the Soviet Government.

Yet it would be an unforgivable error not to take notice of existing shortcomings. The large Aldan industrial Raion suffers particularly in this regard. There are some executives of the Republic's departments, particularly the People's Commissariat of Agriculture, who have not completely broken with peacetime methods of work. The most important shortcoming is complacency and carelessness, on the part of some industrial, government, and even Party executives, accompanied by extremely uneconomical waste of raw materials, fuel and food supplies.

The people of the Republic are taking active part in the building of the Defense Fund. Since the outbreak of the War for the Fatherland, the people of the Republic have contributed 25,633,000 rubles to the Defense Fund and 2,570,000 rubles for the building of a tank column (to be named after Yakutia—W.M.). They have also contributed bonds to the value of 41,000,000 rubles, 2,655 grams of gold, 504 kilograms of silver, and much meat, butter, bread, and other food products.

The collection of warm clothing for the Red Army has been accompanied by a truly exceptional rise in the political activity and understanding of the people. Since the outbreak of the war, 141,127 pieces of warm clothing of various types have been collected and sent to the front (the entire population of Yakutia in 1939 was 400,000—W.M.).

In connection with the coming Twenty-Fifth Anniversary of October, there has developed a broad popular movement for the collection of presents for the soldiers, officers, and political workers of the Red Army. During the first fifteen days of this campaign collective gifts to the value of 2,000,000 rubles have been donated. A train load of these gifts has left Irkutsk for the Western front. It is being accompanied by a delegation of Yakut working people. Aside from this more than 3,000 individual gift packages have been sent by mail.

The industrial enterprises, collective farms of the Republic, have every possibility of further improving their work and giving greater aid to the

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fighting fronts. Full of an unbending determination to do everything within their power for victory over the hated enemy the working people of Yakutia will march ahead to ever greater successes.

Native Peoples.

The equality of the native people is clearly more than formal. Although it is still news worthy enough to be reported in *Pravda* when an individual Eskimo becomes a meteorologist or a paid functionary in the Communist Party, the larger nationalities of the Far East have progressed far from their former nomadic or semi-nomadic existence. The Buriat-Mongols not only have a highly-developed industry and agriculture, but their newly-established State Theater has written and produced full-length plays and an opera, although these art forms were entirely unknown to this people until a few years ago.

Buriat-Mongolia.

Lenin once wrote of the role of women in Soviet Russia that "every cook must learn to rule the state." The Buriat-Mongols seem to have taken that advice literally. Since early in 1941, a former milkmaid, G. A. Tsydenova, has been Chairman of the Presidium of the Supreme Soviet of that Autonomous Republic —this among a people among which it was customary until only a few years ago for girls to be sold in marriage at the age of fourteen or fifteen. Her progress from milkmaid, first to manager of the dairy farm, then to mayor of her village, to paid Communist functionary, to elected member of the Supreme Soviet of the USSR, and finally to the presidency of her own people, epitomizes in the life of a single person the evolution of the Buriat-Mongols in the last twenty years.

Her job is no sinecure. Before the Revolution, Buriat-Mongolia was probably the sleepiest place on earth. Its people, half-starved, driven off the land in favor of Russian settlers, literally hibernated all winter long. "The area under crops was negligible, and even that was still further reduced when the Buriat-Mongols were forced out of the fertile river valleys."[7] Today, however, some of the most important enterprises in the Far East are located in Buriat-Mongolia. The huge new locomotive and railway-car works in Ulan-Ude manufacture all the engines and rolling stock used on the Trans-Siberian east of that point. A technical high school organized in conjunction with this plant

[7] Nicholas Mikhailov, *Land of the Soviets,* New York, 1939, p. 170.

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graduated its first class of 21 in January 1942. Enrolment now numbers 267, according to *Pravda,* January 12, 1942. The largest meat-packing plant in Siberia, a glass works and a flour-mill of great capacity are also located in Ulan Ude. A large proportion of the tungsten mined in the USSR is dug and refined at Dzhida.[8]

New coal mines at Goose Lake now replace coal hauled from the west in the operation of the new railroad to the border. Japanese sources claim that this road has been extended to Ulan Bator, the capital of the Mongolian Peoples' Republic. By the end of 1942, a number of new enterprises in the chemical, non-ferrous metal, cement, oil, asbestos, and consumers' goods industries were to be in operation. A report in *Pravda* of October 14, 1941, stated that quartz sand formerly hauled from neighboring Irkutsk Oblast, ferrosilicon which previously came from Zaporozhe on the Dnieper, and fire-resistant materials that used to be obtained from the Donets Basin and the Urals, were now being produced within the confines of the Buriat-Mongolia ASSR in enterprises set up since the outbreak of the war. Early in 1940, industries already in operation employed thirty thousand workers, and industrial production represented 70 per cent of the output of the Republic's economy by value. The ratio of urban to rural population is now approximately the same as the average for the USSR as a whole. Thus, the gap between east and west has truly been closed.

Agriculture, which still engages the energies of the bulk of the population, has also made rapid progress. The average yield of grain per hectare increased by one-half in two years from 1936 to 1938 and, in the latter year, was considerably larger than the average yield for the USSR. The needs of the war have served to spur the development of local processing industries. Buriat-Mongol grain, previously milled at Omsk, 1,400 miles to the west, and reshipped to Buriat-Mongolia, is now being processed in scattered small mills erected in the Republic since the outbreak of the war. Likewise, vegetables are being dried and preserved in new local enterprises. Cattle-raising is, however, the main agricultural occupation. On January 4, 1941,

[8] It was reported in *Pravda,* October 15, 1941, that the Dzhida mines had already exceeded their year's planned quota of production. Likewise the Ulan-Ude meat-packing plant had turned out its annual quota of sausages, and of canned and cured meats by September 6 and had undertaken to double its planned output in the remaining three months of the year.

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Pravda printed a description of a prize-winning collective farm, which gives a picture of the amazing manner in which these former nomads have taken advantage of the opportunities opened to them.

This farm, with 270 working members, must number about a hundred families. Their village was built completely by their own efforts in the last few years. It consists of board houses—rough-hewn logs still typify the farm home in the longest-settled regions of European Russia—with neatly fenced-in yards along a wide street. There is a school, an inn, a restaurant, a kindergarten, a community center, a radio receiver and public loud-speaker in the square, and a miniature hospital. A power plant provides electric lighting for the street and for the simple electric household appliances which many of the farmers own. Phonographs and sewing machines also are to be found in many homes. The farm itself has a steam-power installation for the central heating of the larger buildings. There are also a saw-mill and a dairy. During the harvest, farmers working in the fields most distant from the village live in a field-house with dormitories, a kitchen and dining room, a club corner, dressing-rooms and lockers, with four family bedrooms. The 270 workers manage, through careful organization, to farm twenty-five hundred acres of land and care for nine thousand head of cattle. The division of labor is interesting. There are thirty full-time operators of agricultural machines, eighty "cowboys" —and girls—and 150 field workers. The rest evidently are engaged in administering the farm and in miscellaneous occupations.

Minor Ethnic Groups.

The minor nationalities have progressed in like ratio. Five years ago, it was already possible to report that in the area east of Lake Baikal there were 161 schools for the children of the northern minorities, 316 Korean and Chinese schools, a Korean technical school and a Korean teachers' college, a Chinese technical school, and Korean and Chinese theaters.

The recent history of the three hundred thousand Yakuts is similar to that of the Buriat-Mongols. A most interesting recent report from that area deals with the functioning of local government in wartime. The functions of deputies to the Soviets of Aldan Okrug, just north of Chita Oblast, were being taken

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over by volunteers. Six hundred and fifty-seven such volunteers were serving on standing committees in January 1942, representing an increase of 101 per cent since the outbreak of war. This report is but one of several indicating that the normal processes of government have not been suspended in wartime. On October 28, 1942, after sixteen months of war, *Izvestia* carried the following item: "Vladivostok. Training courses for chairmen and secretaries of village Soviets. A training course for the chairmen and secretaries of village Soviets has been organized by the Executive Committee of the Maritime Territory. Seventy people are taking these courses. During a two months' period they will study the history of the Communist Party, the history of the peoples of the USSR, the Stalin Constitution and similar subjects. Much attention will be given to questions concerning the role of the village Soviets in wartime. Among the students are invalided war veterans who have been elected to these leading Government posts."

The reference to war veterans was amplified in a note in *Pravda* two weeks later, which spoke with pride of an invalided Red Army man of Chita Oblast who became an active "agitator" for more efficient and intense farm work, applied for and was accepted into the Communist Party, was elected chairman of his village Soviet, and was now attending a training course with most of the thousand newly-elected local officials in the Oblast.

The equal position accorded to the Oriental nationalities in the Soviet Far East and the progress they have made are factors of some importance in maintaining the spirit of independence among the twenty-three million Koreans under Japanese rule, the millions of Mongols in Manchuria and the other elements in the population of that Japanese colony. Should there be war along the Amur and the Ussuri, there can be little doubt that the Soviet Union will benefit from the results of the application in its Far Eastern territory of Stalin's solution of the nationality problem.

Birobidjan.

Another incentive has populated the Jewish Autonomous Oblast, popularly known as Birobidjan. Before the German attack on Poland, the number of Jews in the Soviet Union totaled three million. Although they were the seventh largest nationality in the country, they were dispersed among, and in

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many cases felt themselves part of, the three major Slavic groups —the Russians, Ukrainians and Belorussians. However, many Jews desired an opportunity to develop to full nationhood in a territory of their own. Others, whose means of livelihood had disappeared when trade had become a state or cooperative function, needed a new start in life. To meet this situation, and at the same time to help in building up the population of the Far East, the border area between the Bureia River and the city of Khabarovsk was set aside in 1928 as an Autonomous Jewish Okrug. By 1934, settlement had proceeded to the point where the district could be raised in status to that of an Autonomous Oblast within Khabarovsk Territory. As such, it is directly represented in the Council of Nationalities of the Supreme Soviet of the USSR by five elected deputies.

Quite logically, the plan for the development of the Far East provided for utilization of the traditional skills of the Jewish settlers in making this area the chief center of light and consumers' goods industries in the Khabarovsk and Maritime Territories. On the eve of the war, the furniture factory in the capital of the Oblast, Birobidjan (population twenty thousand), already supplied the needs of both those Territories. However, reports that the Oblast was engaged in the mass production of skis,[9] probably indicate that this and other wood-working enterprises have been converted to war production. Although the population of the Oblast increased tenfold between 1926 and 1939, it numbered little over a hundred thousand in the latter year. It is probable that some Jews from the Soviet territories overrun by Hitler have been settled in Birobidjan.

The process of settling the Far East has just begun. But the fact that the population of this area has increased by more than a third since 1926, coupled with the increase in skill and output per person, has done much to overcome the obstacle to progress in industry, agriculture, construction, and transportation presented by the shortage of labor.

[9] *Izvestia,* November 18, 1941.

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CHAPTER VI

ECONOMIC DEVELOPMENT

An Arctic climate, an utterly inadequate transportation system and a backward population so scanty as to be almost nonexistent except along the railroad and waterways have combined to stack the cards against the Soviets in their plan for a rapid and all-around development of their territories in the Far East.

Nonetheless, these difficulties have largely been overcome. Every advantage of public control of the national economy is exploited to the utmost. Science has been mobilized to "lick" the climate and to fill the blank spots on the geological maps. The country hitched its belt a notch tighter so that the huge quantities of capital necessary to improve and extend the transport system could be found. The discipline of the Communist Party, the enthusiasm of the Young Communist League, the heightened social consciousness of the general population, and the ability of the Government to offer substantial economic inducements to settlers, all helped in bringing industrial and agricultural labor to this region.

Industry and Mining.

Ship, truck, and plane do their part, and the new northern railroad is being built; but for all practical purposes the Far East still has only one year-round link with the rest of the country—the Trans-Siberian. Quite logically, the Soviet authorities have therefore conceived of the defense of the Soviet Far East as a problem to be solved within the limits and with the resources of that region. For twelve years the forces along the Korean and Manchurian borders have been organized as an independent army—now two armies. Until very recently those forces had to depend for every necessity upon supplies hauled from the west and stored in quantities sufficient to last out any war that might be fought in the Far East. The aim of Soviet planning for the region around and east of Lake Baikal has been to provide it with a balanced and complete modern economy capable of serving both the needs of an expanding virgin region

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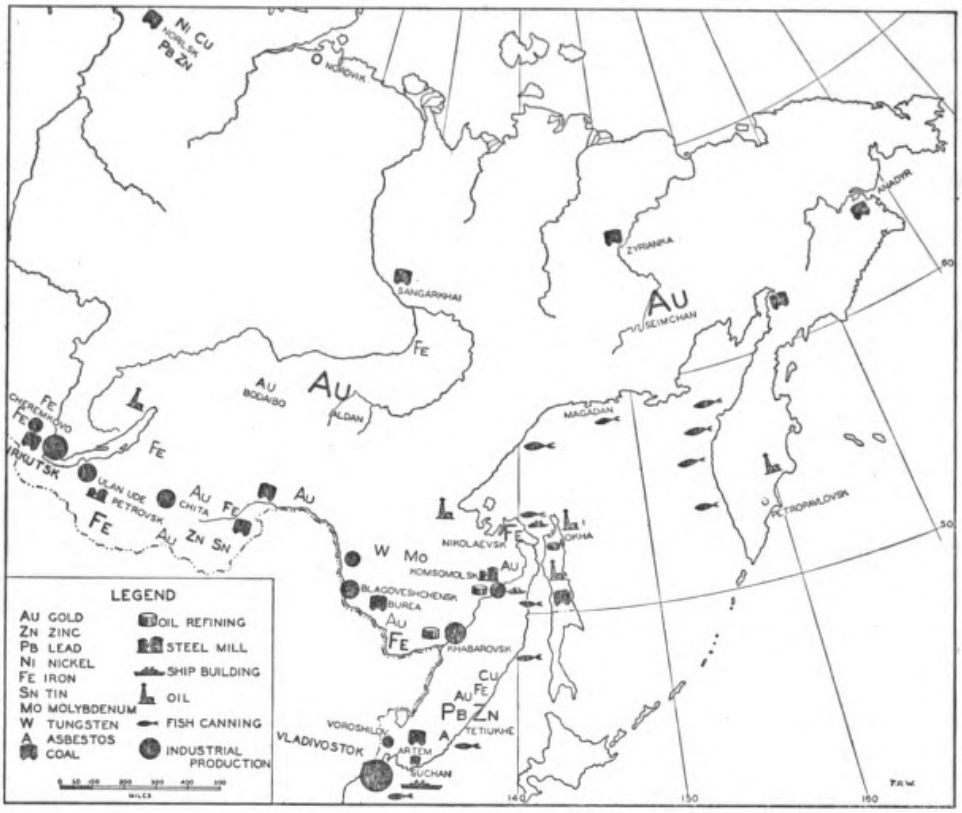
of continental dimensions and of freeing its armies from dependence upon the west. Actually, two new industrial regions were planned, one east of Rukhlovo and the other to the west. In general, that project was to become a reality by the end of the Third Five-Year Plan, that is, by the end of 1942. This goal was approaching realization when Hitler launched his war against the USSR. Far from hindering the progress of the Far East toward economic independence, the war has only spurred this development. The Kamchatka fisheries were reported to



have hauled in their planned year's catch for 1942 by September 7. The Petrovsk-Zabaikalsk steel mill is operating considerably ahead of plan. Sakhalin is now making its own lubricants, indicating that the island now refines oil in addition to producing it. Sixty new brick works, 20 lime kilns, 100 wagon-repair shops, 44 new tailoring establishments, flour mills, and oil presses were going up in 1942 in Chita Oblast alone.

When the Special Red Banner Far Eastern Army was organized in 1929, no Soviet blast furnace of any capacity was smelting

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iron east of the Donets Basin. Today, two steel mills, producing everything from pig iron to rolled steel products, are operating in the Far East. One is at Petrovsk-Zabaikalsk near Chita, and the other is at the remarkable pioneer city of Komsomolsk on the Amur. A third may have been built at the Bay of Olga near Vladivostok, where iron ore exists in proximity to the coal of Suchan and Artem, and a fourth near Irkutsk. Each of the two known to be in operation is hundreds of miles from the frontier across mountainous and sparsely settled country. Each gets its iron ore, coal, and limestone from districts no more vulnerable than the plants themselves. It should prove no insuperable task to provide stock piles of other materials capable of providing for the needs of these plants over an extended period. Each plant is known to have in operation two blast furnaces, and another may have been rushed to completion ahead of schedule at Komsomolsk. The furnaces at Petrovsk-Zabaikalsk were to be quite small, 225 cubic meters each. The Komsomolsk furnaces were planned to have a volume of 600 cubic meters. Unless, as is quite possible, these plans were revised upward, the pig iron output for 1942 at both plants may be estimated at 500,000 tons —and nearly 700,000 if the third furnace at Komsomolsk has been blown in. Steel production will probably be at least twenty per cent larger. Japan's annual steel output is estimated at from 7,000,000 to 7,500,000 tons.

In the Soviet Far East as well as in Pittsburgh or Gary, actual output depends upon the human factor in the equation. In its issue of October 29, 1942, *Izvestia* carried a description of the solution of manpower problems at the Petrovsk mill that sheds much light on the Soviet war effort.

> When V. T. Budilin, a rolling mill foreman, arrived at Petrovsk-Zabaikalsk he worked not at rolling steel but at actually building and assembling rolling mills, the training of future rollers, welders, slitters, and operators. Trained in the Donbass at the Sulin steel mill, Budilin and other engineers and foremen organized new types of production here during the difficult days of the war, and in a very brief period, began to turn out new shapes of rolled steel.
>
> In talking about himself, Budilin always unconsciously begins to talk about the achievements of his comrades and tells stories of this creative labor force. Just like Budilin from Sulin, so do engineers like Orlov from Makeevka in the Donbass, electricians from Leningrad and steel smelters from the Donbass, all working together to create an iron and steel industry east of Lake Baikal, invariably speak of each other, of their comrade-

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ship in production, of the great power of Soviet collective efforts which solves their individual problems, before they speak about themselves.

Watching them one sees before his very eyes how Soviet people became firmer than ever before, during the bitter days of the war. One sees revealed all those great qualities of collectivism in which they were trained for twenty-five years by the Bolshevik Party and the Soviet Government.

The first rolling mill at the Petrovsk-Zabaikalsk plant, the first steel mill in the Far East, began to operate just ten days before Hitler's assault upon the Soviet Union. Immediately, train loads of steel and rolling mill products began to move westward through the wooded hills of Trans-Baikalia. During the war the workers of the plant added to its equipment. It was not easy rapidly to expand the production of this brand new plant. But the creative energies of this Soviet collective smashed all obstacles. And here, far from the scientific and industrial centers of the country, this little-noticed plant has won for itself a place among the leaders in the pre-October competition. (Nation-wide production contest in commemoration of the 25th Anniversary of the Bolshevik Revolution—W.M.) In October, the Government increased considerably its demands upon the rolling mill department of the plant. Nevertheless, the rollers met these orders. Accelerating the speed of production in the course of the competition, they finished the month by producing metal over the quota.

This achievement can be ascribed to the effects of competition and of mutual assistance in production. A striking example of this is offered by the two shifts headed, respectively, by Budilin and Liamov, formerly of Magnitogorsk. It has already become a custom with these two shifts that if one of them sets a record, the other will adopt and improve on its experience, achieving even greater output. Alongside of them at the next rolling mill there works a crew headed by Mrs. Mikhalchenko as forelady. Everyone does his best to help her. Similarly inside the crew itself there has come into practice what might be called the golden rule of aiding those who fall behind in their work. As a result, Mrs. Mikhalchenko's crew works smoothly and the crew as a whole is a worthy competitor of those headed by Budilin and Liamov, who have long years of experience behind them.

The rollers turn out about fifty per cent more than their quota. Yet not long ago all of them were mere apprentices, being trained by Budilin.

Some months ago the experienced Siberian steel smelter, N. I. Rezinkin, put into practice at this plant for the first time the idea of smelting steel in a period briefer than had been supposed to be technically possible. Others followed his example. Their initiative was encouraged and their methods improved upon and now there are half a dozen or more furnace chiefs who smelt their steel in two hours' less time than scheduled by the plant's graph of production.

The steel workers of the Trans-Baikal, in summing up results of the pre-October competition, pride themselves not only on the production of high quality metal in quantities above those indicated by the plant. The rollers declare "every ton of metal we roll is dozens of rubles cheaper than before. We have saved hundreds of thousands of cubic meters of gas, hundreds of kilograms of the oil of which there is now so great a shortage

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throughout the country." The smelters too have something to be proud of. They have cut the cost of production of steel and have already saved some hundreds of thousands of rubles for the state. The campaign for economy is one of the distinctive features of the present stage of Socialist competition in the collective of this eastern steel mill.

The bitter winter has begun in Trans-Baikalia. This is a difficult time for the steel workers but they have prepared well. And despite the coming of winter, they are continuing to increase their rates of output to meet the needs of the front. They will greet the Great October Anniversary with new achievements in production.

When the Special Red Banner Far Eastern Army was organized, coal was being mined in quantity only in the immediate vicinity of Vladivostok although there was small-scale mining elsewhere along the railroad, and on Sakhalin. The annual output of a little over a million tons represented only 2.8 per cent of the production of the USSR as a whole at that time. But by 1938 the output east of the "hump" in the border and on the island of Sakhalin had risen to 4,750,000 tons. Actual figures for production since 1938 are not available. However, it has been reported that output in the fields near Vladivostok, which remain the largest in the Far East, were ahead of plan after nine months of 1941 had elapsed.[1] Now, coal is also being mined along the Amur and its numerous tributaries and on Sakhalin. Thus, not only will long-haul transportation of coal have been eliminated if the 1942 production plan was met, but the development of local fields has made each section of the railroad and each budding industrial center largely independent in this regard.

Thus, it was reported[2] that all Far Eastern mining districts were producing in excess of plan in November, although quotas had been raised considerably over the preceding month, and that this held true for the widely-scattered diggings at Sakhalin, Raichikha, Lipovets, Voroshilov and Kivda. The Sakhalin mines, in particular, had dug their quota for the year in ten months. The Ordzhonikidze Oil Refinery at Khabarovsk had upped production accordingly, with the result that output in the first ten months of 1942 equaled the goals originally set for the entire year.

Far Eastern independence in the matter of fuel supply has been furthered not only by increased output, but by economy

[1] *Pravda,* September 26, 1941.
[2] *Trud,* December 3, 1942.

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and the use of an amazing variety of substitutes. The two news items which follow, one from *Izvestia* for November 3, 1942 and the second from the issue of October 30th, are typical:

(1) The locomotive engineers of the Amur Railroad are living up to their pledges in the pre-October Socialist Competition and have already economized hundreds of tons of coal. This coal they have transferred to the winter defense reserves of coal. On every run these engineers economized tens and even hundreds of kilograms of fuel. One division saved 102 tons in fifteen days. Another, 60 tons in ten days, and a third, 42 tons in the same period. (2) The use of turpentine as fuel for autos and trucks has been undertaken at the Khapcheranga Tin Combinat, in Chita Oblast. The addition of a few simple devices to the motors will make it possible to operate all the Combinat's trucks on this local fuel. A small plant is being adapted to the production of turpentine.

Oil was included with coal in the provision of the Third Five-Year Plan which established complete independence of fuel imports as a goal to be reached in the Far East this year. Chief oil-producing district in the Far East is Sakhalin, where output of Soviet-controlled wells reached 360,900 tons in 1938,[3] having risen from a negligible 17,600 tons in 1929.[4] This oil is refined at plants in Khabarovsk. The Sakhalin petroleum industry has expanded so rapidly in wartime that it has been necessary to make use of river vessels and barges to supplement ocean-going tankers to bring the oil to the mainland. In addition to the highly vulnerable fields at Sakhalin, and the less vulnerable, but also less important, new producing areas on the Kamchatka Peninsula and at various points on the mainland, the Third Five-Year Plan projected the construction of synthetic liquid fuel plants for which the rich and numerous coal deposits of the Far East would provide raw material. One of these plants was to be located at Cheremkhovo, near Irkutsk. The expansion of the fuel industries and the damming of rivers were to result in an increase in power plant capacity to three and a half times the level of 1937. Because of the role of electricity in modern industry, this figure may be taken as a fair indicator of the planned increase in industrial production as a whole in the Khabarovsk and Maritime Territories from 1937 to 1942.

[3] The Japanese have concessions there dating from 1925.

[4] Dozens of high-yield wells came into production in the newly-opened Ekhabi Field during the war, according to *Pravda*, July 9, 1943.

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In addition to steel and fuel, the Third Five-Year Plan provided that, by the end of 1942, a third major need of expanding industry, and of defense, cement, would be met entirely out of production in the Far East. To this end, output was to be trebled during the five-year period. A plant near Vladivostok which went into operation in 1935 was the second largest cement works built in the USSR during the Second Five-Year Plan. In 1937, the Far East produced 164,000 tons of cement, most of it at this plant. The output of 525,000 tons in 1942 was to come largely from new plants at Komsomolsk, Khabarovsk, and Londoko in Birobidjan. Thus, with cement as with coal, not only will the area east of Lake Baikal as a whole be independent of imports, but each important industrial center—and each corps of Army engineers—will have its own supply nearby.

The status of industry in the Far East emerges most clearly when related to population. At the time of the census of January 1939, the population of the two Territories which formerly composed the Far Eastern Territory totaled 2,330,000, or 1.4 per cent of that of the country as a whole. Percentages of industrial output stood as follows: coal 3.6 per cent, oil 1.12 per cent, pig iron 0, cement 3.01 per cent, leather shoes 0.12 per cent, granulated sugar 0.14 per cent, fish 25.2 per cent.[5]

The population of the same area was to increase to about 2,750,000 by the end of 1942 as a result of resettlement from the west. As the population of the sixteen Republics composing the USSR is approximately 190,000,000, the percentage ratio remains about the same, fractionally under one and one-half per cent. Under the Five-Year Plan, the share of this area in total planned output for 1942 is as follows: coal 5.6 per cent, oil 2 per cent (estimated, and excluding synthetic fuel), pig iron 2.3 per cent (estimated), cement 5.25 per cent.[6] To achieve these goals, this area was allotted nearly 10 per cent of the planned capital investment for the country as a whole, six times its share per capita.

It may be concluded therefore, that in order to meet the exceptional needs of the Far East in building materials, metal

[5] The figures for consumers' goods are for 1937 output, the others for 1938.

[6] These figures are valuable only to indicate the planned and probable degree of industrialization relative to population. The loss of the Donets Basin has artificially raised the percentage ratio of all other sections of the country.

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and fuel for defense and for the development of a virgin territory, it was felt necessary to create basic industries producing roughly from two to three times as much per head of population as does the country as a whole. Similar figures may be adduced regarding the recorded and planned development for Irkutsk and Chita Oblasts and the Buriat-Mongolian ASSR. The difficulties faced by students of the Soviet Far East—and by the Japanese Intelligence Service—in measuring and locating important new industrial developments in wartime, was illustrated most sharply by a news item appearing in *Trud*, December 3, 1942. It read as follows:

> Far East (!!), Dec. 2—The 36th Special assembly-construction unit (!) which won third place in the October competition of builders, completed its schedule of work for the year on November 25th.

The location of important processing and manufacturing industries corresponds roughly to the size and rate of growth of the largest cities. (See p. 28, Table I.)

> Before the Revolution the region's metal industry served only the needs of transport and the War Office. The chief enterprises were the ship-repairing yards at Vladivostok and Blagoveshchensk, the railway-building shops in Nikolsk-Ussuriiskii (now Voroshilov), and the arsenal at Khabarovsk. Under the Soviets the old repair shops were reconstructed and converted into big plants. A factory for agricultural machinery was created out of the arsenal in Khabarovsk. Automobile repair factories were built in Khabarovsk and Voroshilov, to serve the region's rapidly developing motor transport. The largest of the new engineering enterprises is the shipbuilding yard now under construction at Komsomolsk. The first part of this, the biggest shipbuilding yard in the Far East, has already begun operation; an electric station and a number of branch enterprises have been built. . . .[7]

The authors of the preceding paragraph were quite modest in defining the Komsomolsk shipyard as the biggest in its field in the Far East. Although its capacity has never been stated, its cost was six times as large as that of the Marty shipyard at Nikolaev in the Ukraine, which was built at the same time, and which had six shipways. Moreover, its cost was greater than that of any other manufacturing plant of any type ever known to be erected in the Far East. It cost only a little less than did its feeder plant,

[7] E. Raikhman and B. Vvedensky, *The Economic Development of the Soviet Far East,* Institute of Pacific Relations, New York, 1936.

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the Amurstal Steel Works at Komsomolsk, the largest construction job of any kind in the Far East, except the railroads. The first ocean-going vessel built at Komsomolsk was launched in the fall of 1939.

In addition to its shipyard and steel works, which in itself includes such by-product enterprises as a cement mill and building-block plant, Komsomolsk has a petroleum refinery, a plant making gas-generator engines, another making storage batteries, a cellulose, pulp and paper mill, a brick works making twenty million bricks per year and another with an annual capacity of six million, railway repair shops, two sawmills, a sugar refinery, a fish cannery and other plants.

Except for the steel works, which makes it an unusually favorable location for metal manufacturing, the industries of Komsomolsk may be taken as fairly typical of the larger cities of the Far East. It is indicative of the effort to make even the most distant mining regions independent of transport as far as possible, that far-off Magadan, on the north coast of the Okhotsk Sea, has a glass works. That industry functions normally and in a typically Soviet manner in this Arctic outpost is attested to by a newspaper report[8] that this factory's scheduled output for the year had been produced in eleven months.

Non-ferrous metals and lumber are, with fish and fur, the main items normally shipped from the Far East to the western portions of the USSR. Each of these items comes from several widely-scattered localities. It is clear that the industries of the Far East will not suffer for lack of them in case of emergency.

The largest refineries in the non-ferrous metals industry are separated as widely as are the two great steel mills known to be operating in the Far East. One is the Sikhote-Alin Polymetallic Works at Tetiukhe, inland from the Sea of Japan. The other is the Trans-Baikal Combinat. This industry has played a particularly important role in the war. A report in *Izvestia,* January 6, 1942, gives an interesting picture of how production has been increased by the efforts of the local personnel.

> (The personnel) of the "Upper Amur Gold Trust" have built two flotation works, complete with equipment, in order to increase the output of molybdenum. The Darasun Gold Combinat has begun the production of refractory belting, a type of product of which there is everywhere an extreme shortage. The Khapcheranga Tin Combinat has mastered the manufacture of carbide lamps not inferior in quality to the factory-made product.

[8] *Trud,* December 4, 1942.

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The Far East accounts for the bulk of Soviet gold production, and the USSR ranks second only to South Africa in annual output of the precious metal.

Forestry, Fur Trade, and Fisheries.

Lumbering operations in the Far East occupy an increasingly important place in nation-wide output. From 3.82 per cent of the national total in 1932, the camps of the Khabarovsk and Maritime Territories were to increase their share in the felling of timber to 7.05 per cent in 1937.[9] Since then, in accordance with the general development of that area, this proportion has probably further increased. The other Far Eastern areas, plus Krasnoyarsk Territory in Eastern Siberia, were to have provided another seven per cent of the national total in 1937. Progress in recent years is indicated by the fact that the "100,050 cubic meters of timber (cut) in the upper Ussuri Basin in ten or twelve places" [10] in 1935 had more than doubled to 250,000 cubic meters to be cut along 22 tributaries in 1942.[11] During the war, the industry has been highly mechanized, enabling women to take the place of men even in felling operations. Floatage has been speeded by means of ice-road transport to the rivers before the break-up, and of floating by raft rather than in bulk. This last measure has decreased losses, particularly of valuable hardwoods, of which as much as one-half had sunk and been lost in previous years.

The fur-trapping industry of the Far East is an increasing source of foreign exchange. That it has not been neglected during the war is indicated by news items—such as one which reported that the trapping of muskrats, not native to the Far East, was to begin in 1942 in the neighborhood of a lake in northern Buriat-Mongolia where 278 of these animals had been colonized in 1939. This small group had multiplied to seventy thousand in the three-year interval (!), and ten thousand were to be taken during the season.

The fisheries of the Far East are world-famous both for their products—salmon and Kamchatka crab—and for the annual bickering between the USSR and Japan over their use. In 1937,

[9] *Vtoroi Piatiletnii Plan Razvitiia Narodnoga Khoziaistva SSR T. II,* Gosplan SSSR, Moscow, 1934.

[10] A. Tsymek, *The Forest Wealth of the Soviet Far East and Its Exploitation.* Institute of Pacific Relations, New York, 1936.

[11] *Izvestia,* April 14, 1942.

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the Azov and Black Sea fisheries, now lost to the USSR, accounted for 18.8 per cent of the Soviet catch. It is entirely possible that the Far Eastern fisheries have been called upon to make good the bulk of that loss, in addition to supplying their normal output of thirty per cent of the catch in all seas. At all events, wartime reports from these fishing grounds indicate a heroic effort to step up production. During the first four months of 1942, the catch in the Sea of Japan was double that during the same period of the preceding year.

Evidently, this was in accordance with plan and not merely a seasonal freak, for in October it was reported that the largest fishing and cannery organization operating in the Japan Sea had met its schedule for the year in ten months by catching *three times* as much as in 1941. Another huge cannery at Vladivostok turned out twice as many filled cans in eleven months of 1942 as it had in all of 1941. All canneries on Sakhalin and along the miles-wide lower Amur had met their annual schedules in nine months. The great Kamchatka fishing enterprises met their annual schedule in eleven months, as a result—among other things—of continuing to go after salmon varieties later than October 1. Kamchatka now fishes all year round.

For the first time in history the twenty-odd canneries of the Maritime Territory were kept in operation during the winter months. A report from the important fishing grounds of Vostok Bay, in the immediate vicinity of Vladivostok, is typical of the measures taken to increase the catch everywhere along the coast. Six hundred fishermen's wives took the place of their soldier husbands in the seiners, many of which were entirely manned by women. Deep-sea fishing began in the middle of March, six weeks earlier than usual, despite danger to vessels and nets from floating ice fields. Labor laws were forgotten by crews eager only to do their best. Boats put out at five a. m., instead of at eight as in previous years, and tied up fifteen to seventeen hours later. Two thousand seasonal workers always needed in previous years were not available, but fishing and canning went on at higher rates than ever before. Commercial fishing on inland lakes expanded into an important branch of the industry. A report in *Pravda* on July 11, 1943, states that the haul in Irkutsk Oblast had trebled during 1942. To achieve this result, nine new canneries and eighty new fishing vessels had been built, while 940 dwelling houses were repaired, and others total-

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ing 120 apartments were built for the use of fishermen evacuated from the west. Lake Baikal became a major source of fish.

The 1941 whaling season brought in an all-time record catch despite the fact that, for the second year, the recently-established fleet operated without the supervision of foreign harpooners. In 1942, with the haul averaging seven of the huge animals per day, whale meat was put up in cans to add to the national food supply.

Agriculture.

Basic to the maintenance of the urban population and military forces of the Far East is, of course, its food supply. In this field, fortunately, there are statistical data covering acreage sown in 1941 and, partially, for 1942. Although there is no information as to the total crop harvested in the Far East, the latest information available on average yield per acre shows the Far East to be slightly above average for the Soviet Union in this regard. Thus, the relation of the proportion of sown acreage in that area to its share in the population is a conservative index of its independence in the matter of food.

TABLE V

AVERAGE YIELD OF ALL GRAINS IN THE SOVIET FAR EAST AND IN THE SOVIET UNION, 1934–38 [12]

(in centners per hectare)

Region	*1934*	*1935*	*1938*
Maritime and Khabarovsk Territory	8.6 [a]	9.0 [a]	no data
Buriat Mongol ASSR	no data	no data	11.4 [c]
U. S. S. R.	8.5 [a]	8.7 [a]	9.3 [b]

[a] *Sotsialisticheskoe Stroitelstvo SSSR.* Gosplan, Moscow, 1936.
[b] *Sotsialisticheskoe Selskoe Khoziaistvo Soiuza SSSR.* Gosplan, Moscow and Leningrad, 1939.
[c] *Vsesoiuznaia Selskokhoziaistvennaia Vystavka,* 1939, OGIZ, Moscow, 1939.

In 1941, the spring sowing plan for the Far East provided for the planting of 2.95 per cent of the acreage to be planted throughout the USSR. This corresponds with almost minute exactitude to the share of the Far East in the total population of the USSR according to the census of 1939—2.96 per cent. As

[12] No tables of yield by administrative area have appeared since 1935. In 1934 and 1935 the Buriat-Mongol ASSR, as well as Irkutsk and Chita Oblasts, were part of the Eastern Siberian Territory. This Territory included the present Krasnoyarsk Territory, which alone planted an acreage 50 per cent larger than the combined areas under crop in the three Far Eastern districts then included in it.

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settlement in the Far East during 1939, 1940 and early 1941 is known to have been negligible, it can be concluded that the area produced enough grain to meet its own needs in 1941. This conclusion is borne out indirectly by a report in the *Information Bulletin* of the Soviet Embassy at Washington, July 11, 1942, which speaks of recent progress in agriculture in the following terms:

> . . . in 1941 collective farms in the Khabarovsk Region (Territory-W.M.) supplied the state with twenty-five times as much grain as in 1937, (representing) an increase of thirteen thousand tons over 1940. In 1941 Khabarovsk region (Territory) farms produced thirty-four thousand tons more potatoes than in 1940 and eight times more than in 1937. The vegetable harvest increased almost six times in comparison with 1937 . . .

The war resulted in a tremendous upward revision of plans for agriculture in those areas remaining in Soviet possession, because of the loss of huge acreages of farm land to the enemy. Thus, the acreage sown to winter wheat in Khabarovsk Territory in the fall of 1941 was three times as large as in 1940.

1942 saw even greater increases in the area under crop, evidently for the purpose of converting the Far East, which had imported grain until two years earlier, into a grain-exporting region. The Maritime Territory, which had planted 324,000 hectares in the spring of 1941, was to sow 120,000 additional hectares in the spring of 1942,[13] a jump of 37 per cent in a single year. Buriat-Mongolia increased its planting by 12.6 [14] per cent over the 419,000 hectares sown in the spring of 1941, and Khabarovsk Territory by 10.7 per cent. In the fall of 1942, Irkutsk Oblast sowed 75,000 acres more than in 1941, according to *Pravda,* September 24, 1942. In neighboring Buriat-Mongolia, winter plantings exceeded the goal set by 14.9 per cent.[15] The danger of crop loss due to frost has lessened as a result of measures which made it possible to bring in the harvest in Irkutsk Oblast in the fall of 1942 fifteen days earlier than the preceding year. The extent to which the crops taken from these additional hundreds of thousands of acres will be needed to meet the requirements of refugee farmers and industrial workers may be deduced from published data on the floating of the annual internal loan. The 1941 loan was floated on the very eve

[13] *Pravda,* April 3, 1942.
[14] *Pravda,* November 3, 1942.
[15] *Pravda,* November 3, 1942.

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of Hitler's attack on the USSR. The 1942 loan was floated ten months later. Khabarovsk Territory took 2.6 per cent of the first and 2.8 per cent of the second. As there is no reason to assume either a shift in the ratio of the monetary surplus available to persons in the Territory by comparison with the rest of the USSR still under Soviet rule, or of other factors making for a rise in subscriptions relative to other areas, the difference may be ascribed to a shift in population. If the difference between the 1941 and 1942 percentages be attributed to this factor, then the population of the Territory grew by 7.7 per cent during the year, as a result of an influx of refugees. This figure represents a colonization much smaller than that for the country as a whole. However, it jibes both with the inadvisability of expanding population at a rate more rapid than the food supply can be expanded—it should be remembered that acreage in the Territory rose by 10.7 per cent during the year—and with the obvious fact that an area itself vulnerable to attack is hardly the place to concentrate the bulk of a working force needed to replace lost industrial and agricultural output.

It is doubtful whether the huge jump in acreage in the Maritime Territory was accompanied by a rate of increase of population much larger than in Khabarovsk Territory. The share of the Maritime Territory alone in the 1941 acreage was insufficient to indicate an ability to meet its own requirements, while the 1942 acreage brought the total up to the level necessary to assure independence of rail shipments from Khabarovsk Territory. This achievement of independence of the Maritime Territory in food supplies even from the rest of the Far East is of particular importance because of its exposed position, and because at several points, the railroad touches the very frontier. That this has been the main consideration involved in planning the exceptional development of the agriculture of the Maritime Territory in 1942 is indicated by the fact that the bulk of the new acreage was to go to grain, essential as the basic foodstuff, while the other districts of the Far East, their grain problem solved, were concentrating their efforts on other foods and on industrial crops. According to *Pravda* for July 16, 1942, the Maritime Territory not only carried out the projected 37 per cent increase in acreage under crop, but actually planted 19 per cent more land than called for even in this amazing schedule! Some idea of the ingenuity, organization and sweat that

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made this feat possible is given in the two articles from the Soviet press which follow. The first describes farming in an entire raion, or county, the second—on a single farm.

Everywhere here there are sopki. Steep and high, they are thickly overgrown with virgin forest from their feet to their pyramid-shaped peaks. The thick growth of green forms solid walls which stretch as far as the eye can see and seem impassable. These walls, so densely green they are almost black, rise unexpectedly and seem to hang over this broad valley. At one place the valley seems to disappear among the sopki and at another it reappears and extends without a break for many kilometers.

Fruit orchards extend right to the edge of the thick virgin forest. At the foot of the hills there grow wild grapes and lemons, and just inches below there redden bunches of cultivated raspberries and currants.

We are in the sunny and fertile Suchan Valley. Its riches are being exploited by the collective farmers in the Maritime Territory as one would expect of real Soviet people. A rich harvest has already ripened. The wheat and oats have already been gathered in. The potatoes and vegetables are being dug up. Striving to increase their aid to the front, the collective farmers increased the acreage of the crop this year by 5,000 acres. That was not an easy job in this area for every additional square yard has to be won from the forest and the rocks. Moreover, the very increase in acreage of the crop itself increased the heavy load borne by everyone capable of farm labor. It is enough to say that in peacetime each farmer in this valley cultivated slightly more than five acres of land. Today, when there are fewer to do the work and the land under crop is increased, each one must cultivate over ten acres. But people knew that their country needed grain.

For example, the Red Guerilla Collective Farm increased its acreage under crop by nearly 750 acres. In order to harvest the entire area and carry through the winter sowing in time, it was calculated that 368 persons would be needed. Actually only 200 were available. The gap was filled primarily by raising the productivity of labor. The best gang-leader, Mrs. Ksemiia Gutseliak, voiced what was in everyone's mind when she declared, at a general meeting of the farm, "You'll find the members of my gang in the fields until all work is completed." Others followed her example. People worked without rest day and night and finished the winter sowing in fourteen working days.

The summer had been dry. The sun beat down without a break from the 15th of May until nearly the end of June. Weeds grew rank in the fields. They exhausted the earth and throttled the seedlings. Yet the farmers saved the harvest. They established a system of painstaking observation and care of the fields. During the month of June, 12,500 acres of grain were weeded twice over and the vegetables and potatoes three times.

The experience of highly organized and self-sacrificing labor accumulated during the spring sowing, was applied during the harvest. In Voroshilov Collective Farm, there emerged the slogan, "Comrades, Collective Farmers. We saved our good crop from the drought, we must not lose

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any of it during the harvest. We must remember that every single grain is today more badly needed by the country and the front, than ever before."

Every farmer fought to carry through that slogan. From the first day of the harvest more than a thousand women turned out with sickles, 500 choppers with knives, and 50 reapers with horse-drawn equipment.

During the first days of the harvest the shortage of people was particularly keenly felt but the aged, school children, and youths turned out to fill the gap. 1386 school children worked on the farms. In addition, housewives and office workers from the county seat came out to help. Even in the buildings of the County Soviet and Party Committee, only a single person remained on duty. Everyone else worked in the fields.

It was feared that not everyone would be able to fulfill the quotas for reaping by hand. Facts proved otherwise. For example, on the Red Guerilla Farm, the average number of sheaves harvested and tied per person was 260 instead of the 115 set by plan. The choppers of the Anisimov Farm chopped daily not less than 3½ acres against the quota of 1¼ acres.

A high level of labor productivity made up for the shortage of working hands and made it possible considerably to increase the amount of work done. The plan for the Suchan Valley had proposed that of the entire area under crop 6,000 acres be harvested by hand and by means of simple machines and 6,200 with the aid of harvester combines (the figure of 5,000 acres added to the acreage under crop this year, referred to earlier, may be compared to the total acreage of 12,200 acres of grains indicated here. Thus in a single year sown acreage was increased by 40 per cent.—W.M.)

In order to save the entire harvest to the very last grain, the collective farm Farm-Labor Unity conducted organized gleaning of the harvested fields. Other collectives did likewise. A few hundred youths and school children were able to glean the remaining kernels of grain from 7,500 acres by hand and with horse-drawn equipment.

The harvest and threshing of grains in Suchan Valley are already completed but work is still proceeding at top speed. The rich harvest of millet, buckwheat, vegetables and potatoes, has now begun. Red Wagon Trains from the collective farms are hauling grain to the state warehouses and elevator. The collective farms of the Suchan Valley will have done their share for the war efforts this year. Its 21 collectives will have sold to the state about 85,000 poods[16] of grain, 120,000 poods of vegetables, and 180,000 poods of potatoes.

The taiga is rich in wild animals. There is an abundance of bears, squirrels, foxes, rys, and wild boar in the surrounding woods. The meat and pelts of these animals are also needed today, and the collective farm hunters work the year round. It is enough to say that the 30 best hunters of the Suchan Valley alone, during seven months of this year, prepared and sold to the state more than 1,500 animal pelts.

Everything that can be of value to their Fatherland is being made use of by the Suchan collective farmers, and although the fields themselves will soon be empty of people, the farmers will continue to live an

[16] One pood = 36 lbs.

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intensively productive life, for each succeeding day is evaluated in terms of what it has contributed to the country and the front.[17]

The last drops of rain dripped off the zinc-covered roofs of the collective farm barns. Little rivulets streamed down the steep sides of a nearby sopka, (small volcanic hills typical of this region—W.M.) carrying sand, earth and pebbles. At the foot of the sopka, there flowed a turbulent mountain stream. Heavy clouds hung low over the hilltops. The rain which had lasted for many days had brought much worry and excitement to the collective farmers of the "Lazo" farm. (Lazo was a young Bolshevik leader burned alive in a locomotive fire box by the Japanese during the period of intervention—W.M.). Before the rains came, the harvest had been at its height. The threshing had been going well. Some of the grain was already stacked but part of it was still standing in shocks on the field when the rainy weather had stopped field work. It was this more than anything else which worried the farmers. The fields of the "Lazo" farm extend inland along a narrow valley from the sea itself. These are lowlands. In some spots the water had risen as far as the shocks of grain.

The Communist Party members had gathered in the farm headquarters. Words were few and to the point. From the chairman's seat there rose an elderly sunburnt woman—Anna Nikolaevna Shemchuk.

"To wait until the weather is completely cleared up is impossible," she said. "You can't work that way nowadays, comrades. We must get out into the fields today." The group of Communists unanimously approved the proposal of their local chairman. The meeting decided to arrange for the grain to be dried out. Immediately people were assigned to various fields. Communist Party members were sent to places where the harvest was most difficult. By noon the fields were again alive with people. Everyone went to work with a will. Four crews prepared stacks. Eight threshing floors were cleared in the fields.

The collective farmers took apart the shocks and carried heavy bundles of sheaves to the threshing floor that had just been laid out. The wind dried out the wheat. Young Communists carried the sheaves to the stacks and here others vied with each other to work most rapidly and skillfully. Near the highroad Sergei Andreevich Kornilov got the thresher ready for operation. Everyone on the farm loves this honored old man, a Communist Party member and still a gang-leader at the age of 72, for his zealous work in the interests of the collective. He knows every kind of farm work and everything that he does is done well and quickly. Kornilov is the first assistant chairman of the collective farm Party organization, and holds a similar position on the farm.

Kornilov, aside from his responsibilities as a leader of a field gang, is also the farm's blacksmith, mechanic and agronomist. He repairs all the agricultural machines himself, operates a reaper, manages to visit all the field camps (during the harvest Soviet farmers live in the fields in order to avoid a long trip from the village to the ends of the collective farm's territory each day—W.M.) and assigns people of his gang to their duties. Even during the harvest Kornilov had found time to teach two wounded veterans of the war how to repair machinery.

[17] *Izvestia*, September 26, 1942.

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Soon the thresher started to work. The valley rang with the noise of the tractor exhaust. Maria Olifir, the wife of one of the veterans, fed shocks into the machinery, for hours on end without straightening her back. The Young Communists, Tonia Yakushchenko and Galia Kononenko gathered up the straw. The girls worked energetically, skillfully. The sacks of threshed grain were immediately loaded on wagons. The golden, heavy grain was delivered to the barns of the collective farms. The collective farmers did not leave the fields for days on end and the whole harvest was successfully dried and stacked.

Last spring the farmers of "Lazo" kolkhoz had worked well. Many tons of manure, mineral fertilizer and fowl droppings had been carted out to the fields. The sowing had gone well. The acreage under wheat, oats, barley, potatoes, soy, corn and tomatoes had been considerably increased.

The earth amply rewarded the collective farmers for their labor. A rich harvest ripened in the fields. Particularly fine were the crops of wheat, barley, potatoes, soya and vegetables.

The collective farm met in full its obligatory sales of grain to the state. The crop from the very first acres harvested was hauled to the state granaries and to the special grain reserves set up for the Red Army and for collective farmers who had suffered from the German occupation. The "Lazo" farmers also met in full the requirements for sale of vegetables to the state. It sold tons of vegetables to the canneries and paid its rent in kind to the Machine and Tractor Station for the use of its equipment and workers.

One will moves all the workers on the fields of this collective farm: to provide as much food and raw materials as possible to the fighting fronts. The collective farm met in full its year's quota for the sale of eggs, milk, wool, and hay.

There is yet much to be done. Now, even as they did at the beginning of the harvest, the farmers rise before dawn. The thresher works 24 hours a day. Wagons loaded with grain and vegetables move along the roads day and night. The farmers' efforts are now directed to making sure that the harvest is completely gathered and protected against loss. To this end, all the barns had been put in good repair by the time threshing began. The dried and sorted grain was poured into bins.

It is a long distance from here to the front but this collective farm on the shore of the Japan Sea is bound to the men in uniform by thousands of threads. Many of the farmers have sons who are heroically fighting against the Hitlerites. Old Kornilov has three sons in the army. The collective farm chairman, Mrs. Shemchuk, has two sons at the front. The farmers work without sparing themselves in the knowledge that by their labor in the fields they are helping their brothers, sons and husbands in the Army.

Great is the patriotism of the people of this far-off kolkhoz by the sea. Not long ago there was a general meeting of the farmers. In passionate speeches, Kornilov and the Communist tractor driver, Shalaikin, proposed to give a quantity of potatoes and vegetables to the Red Army. Three farmers, not members of the Communist Party, rose to speak in support of this proposal. The meeting decided to sell to the government 90 tons

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of vegetables more than it was required to, and to donate to the Red Army 576 pounds of dried vegetables and potatoes. In addition to this, every family promised to dry and give to the Red Army 22 pounds of vegetables or potatoes.

In all these commendable activities of the "Lazo" farmers there can be seen the organizing role of the Communists. This year's harvest was much better than last year's. The Bolsheviks were themselves leaders of competition in the fields.

Even here on the shores of the Pacific Ocean, there has been heard the appeal of the Altai collective farmers (the reference is to a public declaration calling upon all of the country's farmers to work without stint on behalf of the war effort—W.M.). The grain farmers of the Maritime Province have answered this appeal with a new upsurge of enthusiastic labor.

"The Red Army," they declare, "will get enough food and raw materials. That will be our blow at the enemy.[18]

Diversification of Crops.

Prior to the Revolution, fully 94 per cent of the crop area in the province now organized as the Khabarovsk and Maritime Territories was sown to grain. Vegetables, potatoes, sugar, tobacco, the raw materials for the textile industry, and vegetable oils all had to be imported, as did much grain. By 1938 the proportion under grain had fallen to 68 per cent in the Maritime Territory and 77 per cent in Khabarovsk, figures not widely at variance with the 75 per cent of all Soviet agricultural lands under grain. Thus, although all types of agricultural products were still being imported, the food economy of these territories was fairly evenly balanced. However, for the Far East as a whole, grain still occupied 85 per cent of the sown acreage in 1938. It is this which accounts for the exceptional efforts to increase plantings of vegetables and industrial crops, as indicated in the plan for the 1942 agricultural year in Buriat-Mongolia cited above.[19]

Evidently, these efforts met with success, for it was reported that the collective farms of Buriat-Mongolia had met fully the plan for vegetable deliveries to the state. Thus Buriat-Mongolia increased its grain acreage in 1942 by "only" 9.4 per cent, while that under vegetables rose by 27.7 per cent, and the area

[18] *Pravda,* October 7, 1942.

[19] *Pravda* reported, October 9, 1941, that the first sugar beet crop had been harvested in Buriat-Mongolia. It had been planted in ten counties (Aimaks). In 1943, beet cultivation exceeded the planned figure by 53 per cent.

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under industrial crops went up by 111.2 per cent in that single year.

Wheat is the principal grain crop. Oats is next in importance. The only plantings of industrial crops before the USSR entered the war were to soya, sunflower, sugar beet, flax, and perilla—a new oil-bearing plant. Soya bean was cultivated only in the Khabarovsk and Maritime Territories and sugar beet only in the south of the Maritime Territory, near the new refinery at Voroshilov. The collective farms alone planted 150,000 acres to soya in the Maritime Territory in 1942, while a single state farm named after Sun Yat-sen planted another 15,000. Despite technical difficulties, harvester combines have been equipped to bring in this crop.

In 1941, there were experimental plantings in Khabarovsk Territory of sugar beet, tobacco, and rubber-bearing plants. Success, and the need to use every suitable acre everywhere to replace the large territories under these crops that had been lost when the Ukraine was overrun, led to large-scale plantings in 1942. In Chita Oblast where agriculture is centered farther to the north than in the other Far Eastern territories it was only in 1942 that experimental plantings of the sugar beet were first made. They were successful, and large-scale plantings were scheduled for 1943. The manner in which preparations for this new venture were made are testimony to the efficiency of collective governmentally-supervised farming in the USSR. First, the experimental areas themselves were selected with the aid of governmental agricultural experts. Then, beet-farming crews were organized on each collective—this in the fall of 1942—and special courses were organized for the training of technicians in this field. The best weedless fields in protected river valleys were chosen for beet cultivation. In the fall of 1942, the beet-farming crews fertilized and ploughed these fields, thus making possible planting under the best possible conditions in the spring of '43. Meanwhile, the Government took preliminary steps toward the building of sugar refineries to handle the expected crop. Buriat-Mongolia, too, planted large acreages to industrial crops and to flax in 1942, following successful experiments the previous year. Tobacco and flax, and buckwheat and pumpkins in the food-crop category, were planted on the island of Sakhalin for the first time in 1942. State-owned farms there turned in 60 per cent more potatoes and 120 per cent more vege-

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tables in 1941 than during the preceding year. Hemp, flax, and millet were grown successfully in the Trans-Baikal area in 1941, contrary to beliefs that these crops could not be raised under local conditions of climate and soil. Honey is an important supplementary sugar "crop," the 1942 yield in the Maritime Territory being 12,000 tons.[21]

The rapid development indicated above—in acreage sown, yields secured, and diversification of crop—is the more remarkable in that it is taking place in wartime. Men, machines, and horses have been called to the colors; and, as in previous wars, a drop in agricultural production might have been expected. But popular enthusiasm, the power of the state, and a remarkable skill of organization in the utilization of all available resources have combined to make possible the unprecedented progress indicated in the preceding pages. Instead of waiting for their entire crop land to become clear of snow, collective farmers sowed their land as it emerged from under its cover, so as to take advantage of every possible day of the best growing-period.

Before the sowing began, industrial enterprises sent mechanics to the farms to put the implements in shape. Thus, 124 such crews were sent to the Machine and Tractor Stations and state farms of Khabarovsk Territory alone during the month of March 1942. At the Irkutsk roundhouse, a special machine-shop train was fitted out which moved from one Machine and Tractor Station to the next along the right-of-way. In return, farms provided seed and lent tractors for use in the factory workers' new truck gardens. One hundred seventy tractors were made available in this manner in the Maritime Territory.

Despite the use of all suitable industrial facilities for war production, the means were found to set up entire new factories to make spare parts for tractors and agricultural machinery, such as that established at Voroshilov.[22] Efforts such as these were stimulated by the issuance of a special banner to be presented in the name of the war cabinet (the State Committee on Defense) to the district or Republic doing the best work in the repair and maintenance of tractors! The Maritime Territory was one of the leading contenders for possession of this banner. Another

[21] *Izvestia,* October 21, 1942.
[22] *Pravda,* December 3, 1942.

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form of encouragement is the publication in important national organs such as *Izvestia,* of items like the following:

> Chita. The Machine and Tractor Stations and Machine and Tractor Overhaul Shops of Chita Oblast have begun their preparations for the winter repair of tractors in good time. The Olovianitskaia Machine and Tractor Shop has already repaired its lathes, manufactured the necessary tools and organized the production on the spot of the needed repair parts.

With three thousand tractors serving its agriculture, the Maritime Territory trained 1,500 women tractor drivers during the winter of 1941-42, in addition to those who had been trained previously. A new law raised to 150 a year the number of work-day units each member of a collective farm had to work in the collective economy.[23] Many farms exercised their right to demand a much higher minimum annual number of work-days from their members.

Housewives, school children and youth were drafted for periods of farm work under another wartime decree. The health commissariat opened new facilities to enable mothers to work: it established during the planting season 590 nurseries and 500 playgrounds in the Amur Oblast of Khabarovsk Territory alone. The school system added special courses in practical farming. Even the Soviet equivalent of the settlement house—Vladivostok's House of Pioneers—trained 133 tractor drivers and 43 truck drivers in volunteer clubs. The city of Chita reported that two thousand of the older school children would work on the farms. Half of them were to run tractors, and 106 were qualified to operate that most complicated of farm machines, the harvester combine.

The nation-wide campaign conducted by the famous agricultural scientists and geneticist, Trofim Lysenko, to increase potato plantings by using the tops of potatoes consumed as food was brought into every home and restaurant in Khabarovsk Territory when the Young Communist organization there

[23] A work-day unit is equivalent to one day of the simplest type of farm labor. More skilled work is defined in multiples of a work-day for each day worked. The collective produce is divided among the members of collective farms at the end of the year in proportion to the work-day units each has earned. In addition, each collective farmer owns his small kitchen garden, cow, pigs, and fowl, the produce of which he may sell in the open market. A majority of the farmers spent most of their time working on the collective estates. It was for the purpose of compelling the cooperation of those who spent more than half their working time on their own plots that this law was passed.

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pledged each of its members to collect fifty pounds of potato tops during the winter of 1941-42. To increase its sugar supply, the Territorial agricultural authorities not only planned the planting of sugar beet but arranged for a large-scale tapping of wild maple and birch trees, with the expectation that 250 tons of sugar syrups would be procured in this manner.

In addition to increased plantings by farmers, home gardening by city people on plots secured for them by their employing enterprises increased greatly. Sixteen hundred acres were planted in this manner to kitchen gardens in Ulan-Ude, 7,500 acres in Vladivostok, and similar acreages in other cities. In all the towns of Chita Oblast the potato harvest in 1942 was at 2½ times the level of 1941, indicating a corresponding increase in the total size of workers' victory gardens. In Balei, now its largest industrial center, every worker has his own patch. This is typical. Enterprising industrial executives everywhere utilized their prerogatives and the willing assistance of the trade unions to organize full-scale farming enterprises for the purpose of guaranteeing an unbroken supply of vegetables, meat, and milk to the personnel of their plants. For example, every mine and other enterprise in the Artem coal fields near Vladivostok had its own farm in 1942, and the total acreage sown by these establishments was three times as large as that of the preceding year.

In Irkutsk Oblast, the number of farms operated by industrial, transport and commercial organizations, and supplementing the basic rations of their personnel rose 2½ times in 1942, for a total of 1200 at the end of the year. Thus, even the smallest enterprise now had its own truck and dairy farm. Jointly, these farms in Irkutsk Oblast possessed 20,000 head of cattle and worked 97,000 acres of land.

Livestock.

Statistically, the 2.96 per cent of Soviet population in the Far East in 1939 possessed 4.8 per cent of the nation's horses, 4 per cent of the cattle, 2.6 per cent of the hogs, and 2.4 per cent of the sheep and goats. However, the livestock census figures are one year older than the census of population, and reports such as that of an increase of 38 per cent in collective-farm-owned hogs in Irkutsk Oblast in the single year of 1941—despite the war—indicate the probability that the relative shortage in small livestock may well have been made up by the intensive cam-

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paign to increase the herds of these animals, conducted on a nation-wide scale during the Third Five-Year Plan. Previous experience and current plans also indicate this to be true. Thus, the number of hogs in the Maritime and Khabarovsk Territories increased from a low of 161,800 in 1933 to 277,700 in 1938 only five years later, and from 400,000 to 700,000 in the confines of the old East Siberian Territory—Krasnoyarsk Territory, Irkutsk and Chita Oblasts, and the Buriat-Mongol Republic. Likewise, the number of sheep and goats in the entire Far East—including the Krasnoyarsk Territory of Eastern Siberia but excluding Yakutia which has never had these animals—increased from 1,268,700 in 1933 to 2,905,000 in 1938.

During the war the rates of increase established between 1933 and 1938 and maintained, according to the partial data available, from then until the beginning of hostilities, were to be further advanced. Thus a meeting of outstanding livestock farmers in the Maritime Territory, reported in *Pravda* on March 31, 1942, gave its approval to the annual plan as outlined before them. This called for an increase, during 1942, of 20 per cent in the number of cattle, 38 per cent in the number of sheep and goats, 52 per cent in the number of hogs, and 78 per cent in the number of fowl. That these plans were lived up to is evidenced by the following news item in *Izvestia,* October 27, 1942.

> Vladivostok. Having already fulfilled their annual plan of compulsory sales of meat to the state, the collective farms of the Maritime Territory are completing the delivery of their quotas of milk, wool and eggs. Dozens of raions in the Territory have already completely fulfilled their annual plans for the delivery of livestock products. A number of collective farms are delivering meat, milk and wool against next year's accounts.

Generally speaking, the Far East is more than self-supporting as far as meat is concerned, can at least supply its own needs of grain, and grows enough vegetables to prevent scurvy in the northern regions and to provide a fairly balanced diet in the more thickly settled communities near the border. The chief shortcoming of the agriculture of the Far East has been the insufficient acreage devoted to industrial crops. As has been indicated above, strenuous efforts are currently being made to eliminate this weak spot. In this connection it is interesting to note that the Sun Yat-sen(!) State Soya Farm in the Maritime

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Territory was awarded a national prize for excellence in the cultivation of industrial crops in the Fall of 1942.

Food Industry.

The growing agriculture of the Far East has resulted in a comparable expansion of the food industry. The Second Five-Year Plan, 1933-1937, saw the erection of the huge meat-packing plant at Ulan-Ude and the sugar refinery at Voroshilov, mentioned previously. Another refinery went into operation in the same town late in 1942, indicating the growth in acreage under the sugar beet. In the "first few days" of operation, it refined 720,000 lbs. of granulated sugar.[24] A soya oil plant at Voroshilov, a meat-packing house at Khabarovsk and another at Irkutsk, flour mills and cereal-manufacturing plants at Khabarovsk and Bochkarevo, a macaroni factory at Khabarovsk and a confectionery plant, probably at Vladivostok, were also put up during that period. The growing cattle herds also made feasible the erection of a shoe factory, somewhere in the Khabarovsk or Maritime Territory, with an output of three million pairs per year.

A similar list for the period from 1938 to the outbreak of war would be several times as long. During this latter period, there were erected not only large state-financed establishments of the types mentioned above, but also hundreds of small plants owned by cooperatives or local government.

During the war, developments in the food industry have been similar to those in other fields. A macaroni factory has been moved from the Ukraine to Irkutsk. The Vladivostok confectionery plant is using wild taiga plants instead of the railroad-carried raw materials it previously depended upon. Heavy emphasis has been laid on the canning and preservation in other forms of food products of all sorts, indicating either shipments to the front or the building of reserves against eventualities in the Far East. The Ulan-Ude distillery is now producing 15,000 quarts daily of a Vitamin "C" beverage made from flavored pine-needle extract. In 1943, the output of locally-owned industry in Khabarovsk Territory was to increase by 9 per cent over 1942. New construction in this category was to include three vegetable canneries and an equal number making starch-treacle.[25]

[24] *Izvestia,* October 27, 1942.
[25] *Trud,* December 4, 1942.

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That consumers' goods industries have not been permitted to suffer as a result of the war is indicated by a report [26] that the mechanized bakery, meat-packing plants and state clothing factory in Khabarovsk had completed the scheduled quotas of output for September 1942, five days before the end of the month.

Economic Policy.

The relative economic importance of the various administrative districts of the Far East is indicated by the 1941 budget, published in *Izvestia,* April 6, 1941. These figures indicate that the economy of the Maritime and Khabarovsk Territories, taken jointly, is considerably stronger than that of the four other Far Eastern Regions and Autonomous Republics put together. Even if to the total of these four there be added the economy of the huge and relatively well-populated Krasnoyarsk Territory, which lies to the west of Irkutsk region and economically speaking faces westward, the joint figures for the Khabarovsk and Maritime Territories are barely overbalanced. Thus it becomes clear that the only developed economy east of the Kuznetsk Basin in Central Siberia is to be found in the

TABLE VI

BUDGET APPROPRIATIONS FOR THE FAR EASTERN REGIONS IN RELATION TO POPULATION[27]

(in thousand rubles)

		Budget Appropriation of		
		A	*B*	*C*
Region	*Population*	*Total*	*R.S.F.S.R.*	*Region*
Maritime Territory	907,220	286,135,000	149,503,000	136,632,000
Khabarovsk Territory	1,430,875	560,244,000	379,578,000	180,666,000
Chita Region	1,159,478	235,934,000	177,845,000	58,089,000
Buriat-Mongol ASSR	542,170	136,823,000	98,489,000	38,334,000
Yakut ASSR	400,544	174,410,000	143,148,000	31,262,000
Irkutsk Region	1,286,696	250,865,000	132,757,000	118,108,000
Total	5,726,983	1,644,411,000	1,081,320,000	563,091,000

extreme Far East. The budget figures also show that the greatest capital investments continue to be made in Khabarovsk Territory.

[26] *Izvestia,* October 2, 1942.

[27] Columns A and B are from *Izvestia,* April 6, 1941. Column C is the difference between A and B, and is the best indicator of the actual economic strength of each district. The population table, giving the figures of the 1939 census, is from *Sotsialisticheskoe Stroitselstvo,* 1933-1938, Moscow, 1939.

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Although Khabarovsk Territory ranked thirty-sixth in population among the fifty-four Autonomous Republics, Territories, Regions, and Cities (Moscow and Leningrad) listed in the 1941 budget of the RSFSR, its budget was the fourth largest. Only the City of Moscow, the City of Leningrad and Moscow Region outrank it. The budgets of the highly industrialized and agriculturally well-developed Leningrad (without the city) and Gorky (formerly Nizhni-Novgorod) Regions were each approximately equal to that of Khabarovsk Territory, although its population is only 44 per cent of that of the former, and 37 per cent of that of the latter. There can be no clearer indication of the extreme importance attached to the most rapid possible development of the Khabarovsk-Komsomolsk-Okhotsk Sea Area.

What, then, can be said of the Soviet Far East, from Irkutsk to the sea, as a factor in determining the position of the USSR in Pacific relations? First, it is thinly populated and therefore highly vulnerable. The population, industries, and agriculture of the section east of Chita are largely concentrated in towns and settlements close to its two-thousand-mile-long border. The cities of this area still depend, primarily, upon a single railroad for contact with the west and with one another. However, the Far East has achieved a high degree of independence of the west, both as regards heavy industry and agriculture. Moreover, the production of its industries has increased so rapidly during the war and in such directions as to make possible definite assistance to the troops on the European front.

After the war the development of economic life in this area will transform the USSR in the Far East from an area vaguely thought of as "the land north of Manchuria" to a position as one of the great powers of the Pacific.

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CHAPTER VII

THE FAR EAST IN WARTIME

Prior to the German invasion, Soviet references to the development of the area east of Lake Baikal uniformly emphasized the need for its economic independence from the west. Since the outbreak of war, the Far East has been told that it must not only do without supplies from the west but must be an arsenal for the European front. Articles appearing in *Pravda,* organ of the Central Committee of the Communist Party, over the signatures of leaders of that organization in the Far East, give a clear picture of how that area was converted from a huge construction camp into a center of war production. They also give an excellent insight into the manner in which the Communist Party has utilized its membership among the most socially-minded elements at all levels in the functioning of the national economy—workers, farmers, technical personnel and executives—to rouse the people as a whole and throw its energies in the direction regarded as most essential for the winning of the war. The new responsibilities of the Far East, and the manner in which they were being met within less than four months of June 22 were first outlined in the public press in the article reproduced below from *Pravda* of October 11, 1941, over the signature of G. Borkov, Secretary of the Khabarovsk Territorial Committee of the Communist Party. Khabarovsk, it will be remembered, is the largest and economically the most important administrative area in the Far East.

The Building of an Arsenal.

Before the war ours was considered a Territory of consumers. Much food was imported. Trainloads of consumers' goods, building materials, machinery and tools for our industries were shipped here.

In the grim days of the War for the Fatherland the Territorial Party organization took upon itself the responsibility of seeing to it that the Territory get along on its own resources, satisfy its needs primarily by the utilization of its own internal reserves, decrease its demands upon the rest of the country, and increase its aid (to it) with each passing day. The Territorial organization of the Communist Party directed the full attention of all Party organizations within the Territory to the

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solution of this problem. Party activities among the masses and political agitation were decisive in successfully carrying through this program.

In industry, thousands of persons now turn out two and three times as much work as they did previously. The number of workers in the Molotov Works who regularly turn out twice their work quota per shift has increased five times in the last two months. In this plant there is a turner named Denisov who does three days' work in one, and a laborer named Kibirev who does three-and-a-half to four times the amount of work required of him. Likewise, the number of "two hundred percenters" at the Gorky Works has quadrupled in the last three months. Here two workers, Votintsev and Koriakov, among others in the crew of the Communist foreman, Filipenin, have multiplied their productivity five times over.

A movement for the mastering of several trades has developed in the factories. Skilled men are being successfully replaced by women in industry and on construction jobs, on the railroads and waterways, in the coal, oil, and gold fields. There are quite a number of construction gangs, crews of fishing vessels, and teams of lumberjacks composed entirely of women.

The conversion of industry to war work has required an ability to utilize one's own resources. For example, when the Molotov plant was assigned the manufacture of a product entirely new to it . . . necessary special equipment was found in various small plants and organizations in the city, where it was hardly being used. In twenty-five days the plant was prepared for serial mass production and now has begun the manufacture of this new product.

The same story can be told of the Kaganovich Works at Khabarovsk, where the technical department under the chief engineer, Tretiakov, succeeded in making, with their own means and personnel, special lathes needed for the manufacture of a new product. The cost was one-seventh or one-eighth of what it would have been had those lathes been ordered from the center (of the country). Other plants are following the example of the Kaganovich Works.[1] Since the war all factories have established shops to rebuild old and manufacture new tools.

In order to help the Territory's industry fill special (war) orders rapidly, the Territorial Committee of the Party has undertaken to check on the supply, distribution, and redistribution of equipment and materials.[2] This action has resulted in the discovery of immense resources.

An enormous role is being played in this matter (establishing independence from the west and conversion to war work) by rationalizers and inventors, whose numbers are continually increasing. As a result of the installation of certain refinements in equipment, suggested by various engineers, technicians, and workers at the Ordzhonikidze Works, and in

[1] This plant, obviously of considerable size and importance, was reported to have filled its planned orders for 1942 in 11 months. (*Izvestia,* December 4, 1942).

[2] The Communist Party and its local organizations have had this right, to a greater or lesser degree, since the beginning of the Soviet regime. In its present formulation, this right and responsibility dates from the Eighteenth Communist Party Congress in 1939.

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particular by the chief engineer, Karpov, productive capacity has greatly increased. In the single month of August these installations resulted in savings of 24,000 rubles for fuel and 145,000 for steam. A drop in so-called "planned losses" resulted in the saving of another 55,600 rubles.

All branches of industry in the Territory have increased their output since the outbreak of war. The machine-building (in this case primarily shipbuilding) plants in the city of Komsomolsk have increased output by fifty to one hundred per cent. Mining of coal on Sakhalin increases month by month, as it does at Raichikha and in other districts. The Okha oil fields on Sakhalin have increased their production. The Khabarovsk cracking plant has increased both output and types of product. The fisheries of Kamchatka and the Okhotsk Seaboard fulfilled their annual plan months ahead of time. The gold-mining industry is working well. Just a few days ago, the Amurzoloto (Amur Gold) trust began producing in excess of the 1941 plan.

Our Territory possesses virtually unlimited possibilities for the establishment of its own food supply. This year's crop was good on both collective and state farms. Many farms harvested an average of twenty-four bushels of grain per acre, or even more.

This year the collective farms of our Territory will give the country incomparably more grain, potatoes, vegetables, fats, milk, honey, and hay than ever before. Dozens of farms have already made all their payments in kind to the Government and, in addition, have donated tens of thousands of pounds of all kinds of agricultural produce to the Defense Fund.

The collective farmers of our Territory are making all efforts to develop every branch of their economy. Last year, winter rye was sown for the first time in the Amur Oblast. The experiment was successful, and this year the acreage under winter grains is three times larger than last. Cattle are also on the increase. Thus, during the last eight months the *Slavnaia Niva* farm in Seryshevskii Raion recorded an increase in its herds of 32 head of cattle, 35 hogs, and 22 sheep. And there are hundreds of such farms in our Territory.

The northern Oblasts—Kamchatka, Sakhalin, the Lower Amur—which imported all their foodstuffs before the war, have done much to create their own sources of supply. Industrial enterprises in the most important towns in these Oblasts now have established their own farms nearby. New producers' cooperatives have been organized. The food industry has developed, as have the state and collective farms. Imports into these northern districts are already being cut.

Naturally, the Territory has accomplished only a portion of the tremendous amount of work that must be done to make use of its internal resources. But, as the saying goes, it is important to begin. It is important that people now understand the need for developing and encouraging local initiative in every way, and that they have had the unbending will and decision to place at the service of the Fatherland the immensely rich resources of raw materials existing in the Soviet Far East.

Far Easterners have that will and decision. Swept on by an unprecedented upsurge of patriotism, the working people of the Far East have responded

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warmly to comrade Stalin's appeal to rise in defense of their homeland, to help the Red Army in every possible way. The savings of our people are pouring into the Defense Fund in an unceasing stream. Twenty-seven million rubles in cash have already been donated by the working people of Khabarovsk Krai. This does not include donations of bonds and valuables. The collection of warm clothing for the Red Army also has found strong support.

Far Easterners are at one with the whole great Soviet people in working to give the country and the heroic Red Army all it needs to win over the German fascist hordes.

Acceleration of Production.

In October, Borkov spoke with pride of the patriotism of workers in all the industries of the Territory who were doubling their daily work quotas. The outstanding individual example of productivity at that time was that of the crew which turned out five times its scheduled output. But on November 20, 1941, writing in *Pravda* of the upsurge in production that had resulted directly from Stalin's famous November speech on the anniversary of the Revolution, he recorded achievements next to which those of a month earlier seem small:

In the department (of the Molotov Works) of which comrade Avdeenko is chief, the well-known Stakhanovite turner Shvanev worked like a veritable hero. In eight hours of work he turned out eight-and-a-sixth days' work. In the department of which comrade Rumiantsev is manager, a group of lathe-hands recorded a considerable achievement. Comrade Tikhonov turned out four days' work in one, and comrade Dorogov four and a third. At Khabarovsk Roundhouse Number Two the overhaul of two engines was completed ahead of time on the eighth and ninth of November. At the Kirov Works comrade Kormushkin, the chief of the Bureau of Rationalization and Invention, went to work at the joiner's bench on November 8th and turned out ten and two-fifths times the day's quota.

The Stakhanovites of Komsomolsk and the coal-diggers of Sakhalin celebrated the holidays with considerable successes in production. The Komsomolsk machine-building plant completed its plan of production for the year on November 15. The First Komsomolsk Building Trust likewise completed its annual plan at about the same time, as did the coal miners of Sakhalin (November 5).[3]

Hundreds and even thousands of examples of labor heroism and flaming Soviet patriotism can now be found in every factory, on every construction job, and in all branches of our Far Eastern state and local industry and transport.

Our collectivized countryside is not behind other branches of production in the all-embracing competition for the fulfillment of Stalin's

[3] *Pravda,* January 1, 1942.

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instructions. The collective farms of Khabarovsk Krai are fulfilling with honor the task set by Stalin of supplying the Red Army with ever more grain, meat and other produce. The Zavitaia, Blagoveshchensk, Bira, Smidovich, Birobidjan, and rural Khabarovsk Raions have made good in their entirety their obligations to the Government in grain deliveries and payment in kind for the services of the Machine and Tractor Stations. The Territory as a whole fulfilled ahead of time its annual plan of meat deliveries and sale of milk to the State. Considerably more vegetables and potatoes than last year have been turned over to the Red Army and the industrial centers.

In Svobodnaia Raion, preparations for spring sowing are proceeding at a real wartime pace. After discussing comrade Stalin's report, the tractor and combine operators and all other workers of the Buzulinsk Machine and Tractor Station voted to complete by January first, ahead of schedule, all necessary repairs to their tractors, combines, seeders, plows and other agricultural equipment, and to do so without (waiting to receive) shipment of additional spare parts. They have already completed repairs on sixteen tractors and ten combines.

On the initiative of its most advanced organizations, the territorial Young Communist League is successfully collecting funds for a group of bombers to be called "The Khabarovsk Komsomol." More than a million rubles have already been donated to this end. The collection is proceeding without let-down.

From far Chukotka (the peninsula facing Alaska) we have received a letter which reads: "In the bitter days of the great war for the Fatherland Chukotka lives the same life as all the Republics, Territories and Oblasts of the Soviet Union. In Anadyr and on Cape Schmidt, in Pevek, people listened with bated breath to the inspiring words of the great Stalin, uttered on the occasion of the anniversary of October (the October 1917 Revolution). Those words have moved the Party and non-Party Bolsheviks of this National District on the border of our country to new feats of labor toward the goal of victory over the enemy."

The working people of Chukotka are actively engaged in collecting warm clothing for the Red Army. In the Chaunskaia Raion, the collective farmers of Kotren, Gemorultyn and Nedelai have sewn more than two hundred pairs of excellent fur gloves, twenty pairs of *torbaz* and twenty warm hats. The Chukot *kokhoz* named after Stalin and many others have also sewn many *torbaz* and fur vests . . .

This is how our country is responding to comrade Stalin's appeal. Thus in these bitter and terrible days is victory being forged over the cursed enemy. . . .

The establishment, since the outbreak of war, of the economic independence of the Far East from the west has been dictated, among other factors, by the need to reverse the direction of the flow of supplies. The shortage of transport facilities and of fuel on a nation-wide scale and the need to clear the tracks of the Trans-Siberian for the flow westward of supplies and men has

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resulted in the intensification of the development of regional independence within the Far East itself. This process has reached a point where individual cities and divisions on the railroad have developed an economy that is very nearly self-contained. In case of need, they could duplicate with relative ease Leningrad's feat of maintaining itself as an arsenal and fortress during sixteen months of siege with only the trickle of supplies that could be brought around German-held Schlüsselburg via Lake Ladoga. Thus the effect of the war in the west upon the economy of the Far East has been to increase its defense potential in terms both of output and of geographic security. At the same time, the Red Army's need of the output of Far Eastern industry and agriculture may be ranked with, if below, the desire to avoid a war on two fronts in explanation of Soviet efforts to maintain the *status quo* along its frontiers with Japanese-held territory.

From the Maritime Province to the Western Front.

Nowhere is the need for regional economic independence more important than in the Maritime Territory, that tongue of land extending southward between the Sea of Japan and Manchukuo. And nowhere do the processes of wartime development of Far Eastern economy described above appear so clearly as in an article on that Territory which appeared in *Pravda* on January 3, 1942, over the signature of N. Pegov, youthful builder of Komsomolsk and now Secretary of the Maritime Territorial Committee of the Communist Party. The information it contains is the more important if it is remembered that, with the exception of the railroad and the timber industry, all branches of the economy of the territory are concentrated south of Lake Khanka and near Vladivostok and would, therefore, contribute to its ability to withstand attack even if the highway and railroad from Khabarovsk were broken.

. . . . . Carrying out comrade Stalin's instructions, the Maritime Territorial organization of the Party has done much to reorganize its work on a wartime basis. To an ever greater degree it has adapted the methods and forms of Party political work to wartime conditions. As a result of a proper coordination of Party work with economic activity and of a widespread expansion of political agitation among the working people, the Bolsheviks of the Territory are guaranteeing an ever greater increase in industrial output, in the production of armaments and munitions for the Red Army.

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Nowadays one cannot approach the problems of evaluating the work of an enterprise on the basis of peacetime standards. Today it is little merely to fulfill the plan. This must be considerably exceeded through maximum utilization of internal resources and local materials.

That task has been understood and, to a considerable degree, met by the railwaymen of the Maritime trunk line (the Trans-Siberian within the limits of the Maritime Territory). Before the war, the Maritime road sent its double-trucked freight and tank cars out of the Territory for repairs. Now it performs this job itself. On the initiative of outstanding Communist workmen and executives, many repair yards at stations are being reorganized into large-scale shops. These shops have already grappled successfully with the problem of complete overhaul of freight and tank cars. The road is also making on the spot spare parts and supplies formerly shipped from the center of the country. Since the outbreak of the war, various items to a total value of 4,500,000 rubles have been manufactured from local raw materials and industrial waste.

For many years industry in the Maritime Territory suffered from a considerable shortage of coal. This limited the development of various branches of the Territorial economy. Coal was shipped from other parts of the Union. The Eighteenth Congress of the Communist Party of the Soviet Union (held in March 1939) placed before the Bolsheviks of the Far East the task of assuring the highest possible rates of increase in coal mining and the conversion of the local economy to the use of local coal. In 1941 that important economic problem was basically solved. Having increased output from existing shafts and put new ones into operation, we are now not only completely meeting our own need for coal but (are able to ship) hundreds of thousands of tons to other parts of the country.

The Maritime Territory has excellent coking coals, but the production of coke used to be done by primitive methods and on a very small scale. The bulk of the coke needed in the Territory was shipped from the center of the country. Taking into account existing possibilities and resources, we have now undertaken (to produce) coke in quantities to meet the needs of the Territory in their entirety. Suchan coal is being used.[4]

Considerable initiative is being demonstrated by the industrial enterprises of our Territory. For many years 'X' Factory turned out only a single type of product. All proposals to manufacture other lines were met by the management with the reply: "We can't produce anything new. Necessary material, special equipment, and experts are all lacking." War came, and this plant was asked to fill certain special orders. What happened? The same executives, with only the same personnel and the same machinery, undertook the production of this new line. A few days of hard work, and one of the departments was already at work on these special orders. The others followed. The Party organization roused in all the workers of the plant the will to fill those orders. And now the Communists in that plant declare—and they are quite correct—that they are ready to produce anything that the front requires.

Widely differing branches of the Territorial economy are being converted to an ever greater extent to the production of munitions and food-

[4] Suchan is in the immediate vicinity, and to the east, of Vladivostok.

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stuffs for the Red Army. In 1941 the fish industry was instructed to supply its products to the Army in a form which would be satisfactory for storage and use under conditions of active warfare. This order was met with a high sense of responsibility by the management, scientists and Party leaders of the fishing *combinat*. They are now producing nourishing, tasty concentrates which do not spoil under any circumstances. Now the fishermen of the Territory have accepted a new responsibility—to *treble* last year's winter catch.

There is, in the Territory, a very diversified network of enterprises which utilize local resources of all sorts for the satisfaction of local needs. After a thorough investigation of their possibilities, the raion committees of the Party came to the conclusion that they are capable of manufacturing many products for the Army and of filling in many gaps in the types of food now being produced. A flood of business-like suggestions for the organization of new types of production are coming in from local Party organizations and from the workers, including both old-timers and young rationalizers. A number of producers' cooperatives are now manufacturing soap. The industrial cooperatives are beginning the manufacture of skis. Sleds and wagons are already being produced. The Vladivostok sweet-goods factory has begun the manufacture of confections and marmalade from wild plants. The leather works is now preparing hides for saddleware. Many industrial cooperatives are now filling special orders (a Soviet euphemism for materials of war).

The resources and perspectives of the local industries of the Maritime Territory are immense. The war has placed upon us the responsibility of greatly broadening the variety of goods produced by our industries serving local needs so as to enable us to cease imports of any and all types of goods from the center of the country. More than that. We must be ready to give the fighting forces all that they demand of us.

Preparatory work on the establishment of three macaroni factories is now being completed. The erection of a tobacco factory and a dairy plant in the city of Vladivostok is planned.[5] Raw materials found in the Territory make possible the production of tanning substances for the leather industry. It should be possible to multiply the output of *solidols* many times over, and likewise the production of liquid fuel from coal. Yet all this covers only a fraction of the reserves of which we can make use.

Every enterprise, every lathe must manufacture armaments for the Red Army. We now have the job of going over from the production of individual items to the serial production of special products and to the proper coordination of various enterprises for the filling of orders for the front.

Industries of the largest size, equipped with the most up-to-date machinery, have (in recent years) been built in the Maritime Territory. The collective farms have been supplied with the most modern agricultural machines. The collective farmers have been granted exemptions making possible the most rapid development of their economy and culture. And

[5] Evidently, at least in this instance, not all plans were realized. For exactly eleven months later *Pravda* carried an article berating Maritime executives for having permitted a shortage of consumers' goods to develop merely as a result of their habit of expecting shipments from the west.

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to the care thus bestowed upon us by the Government and by comrade Stalin we must respond with even more intensive work for the good of our country. We must mobilize all our powers for aid to those at the front in the work of dispersing the wolf packs of fascism.

A Regional Base of Food Supply.

Any attempt to read into the regionalization of the economy of the Far East now proceeding, any special design arising out of the proximity of Japanese forces would not be borne out by the facts. Every city in the USSR, no matter how far from its borders, has been thrown on its own resources for many types of supplies by the shortage of transport facilities arising from the erection of huge plants evacuated from the west to points along railroad lines never designed to carry their supplies and products. Irkutsk, nine hundred miles by rail from the Manchurian border at Otpor, may serve to illustrate this point. The description which follows is also of value in that it gives a more detailed picture of the independent economy of a Far Eastern city than the Soviet authorities have chosen to release about border points like Vladivostok and Khabarovsk. Here, as in the case of the article on the Maritime Territory already cited, it is to be remembered that references to the Oblast actually pertain, for the most part, to suburban areas in the immediate vicinity of three or four large cities along the railroad line. The article on local food supplies for Irkutsk, which appeared in *Pravda* on May 21, 1942, over the signature of V. Kolesnikov, Oblast Secretary of the Communist Party for Trade, is followed immediately by an article on the establishment of local supplies of raw materials for industry at Ulan-Ude, capital of the Buriat-Mongolian ASSR.

The number of subsidiary farms (farms run by industrial enterprises and meeting the needs of their personnel for vegetables, potatoes, milk, and meat) supplying the city of Irkutsk has increased to a hundred and ten this year by comparison to forty-five last. In the Oblast as a whole more than four hundred such farms are being established.

This year there will not be a single enterprise in the Oblast without its own farm. Many enterprises are supplying all needed equipment for their farms, utilizing for this purpose machines not now in use, worn-out machinery, odd parts, metal scrap, and the like.

The sown acreage of the subsidiary farms run by (industrial) enterprises and commercial organizations in 1942 will increase to a total of 45,500 acres, more than twice last year's figure.

The first few days' spring planting season on these farms has gone

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well. The planting will be completed strictly on schedule. In this regard it should be noted that the Irkutsk, Cheremkhovo and Usole city committees have been of considerable aid to the subsidiary farms in providing seed, working cattle, and fuel. For example, the subsidiary farms of the commercial organizations have been supplied with 1,500 tons of seed potatoes, 250 horses, 125 tons of fuel, 160 tons of oats and barley, and 300 tons of hay for feed during the planting season.

The Kuibyshev factory's huge farm, which is planting more than 2,500 acres, completed all preparations for planting ahead of the date set. The first days of actual planting have gone in an organized manner. Adequate supplies of seed, fuel, and haulage are on hand; and all agricultural equipment has been put in full repair and distributed to its points of use.

Industrial and commercial executives have now been given a new responsibility in this regard—that of establishing seed-frame and hothouse farming on a large scale in the Oblast. By the end of 1942, subsidiary farms attached to industry are to include a total of 29,000 seed frames and 6,000 square meters of hothouse space. Commercial organizations are to lay down 4,500 seed frames and 700 square meters of hothouses. Two hundred twenty-five acres of orchards and berry-patches are to be laid out.

Thirty thousand hogs are to be fattened on the subsidiary farms of industry, commercial organizations, and feeding enterprises. The total number of milk cows on these farms will quadruple by comparison to last year. There are already a number of enterprises whose need for milk is met completely by their own farms.

Up to now fowl and rabbit farming and bee keeping have been practically non-existent in our Oblast. In 1942 there are to be chicken coops and rabbit warrens on every subsidiary farm (farm run by non-agricultural enterprise). Two thousand five hundred beehives are to be procured. The two incubator stations in the Oblast are operating at full capacity to supply chicks to the subsidiary farms.

This year has seen a marked intensification of collective and individual truck farming. In the city of Irkutsk alone truck farming is being organized by 584 collective associations uniting 204,000 workers and office employees. (The entire population of Irkutsk in 1939 was only 243,000.) Five thousand seven hundred and fifty acres have been assigned for their use.

The forests and lakes of the Oblast abound in elk, Manchurian deer, wild reindeer, roe-deer, musk-deer, hazel-grouse, partridge, and duck. There are considerable numbers of seal in Lake Baikal. The most modest estimates indicate that no less than six to seven hundred tons of venison and similar meats, 150 tons of the meat of game-fowl, and thirty tons of seal-fat can be procured (in the course of a year from these sources).

The preservation of wild plants of various kinds offers broad possibilities. Mushrooms, berries, cedar nuts, ramson, sorrel, and wild onions are all available. The manufacture of crates and the conclusion of contracts with schools and collective farms which will gather these foods are now going on. The consumers' cooperatives are organizing forty-one berry and mushroom processing plants, twenty-two of which are now ready to go into operation. Eleven berry crushers and a similar number of (other) presses,

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all of the simplest type, are being built. Four hundred tons of berry juices are to be manufactured. All told, the Oblast's commercial organizations are to process 3,000 tons of berries, a thousand tons of mushrooms, 360 tons of cedar nuts, 200 tons of ramson, and fifty tons of wild onion.

New Uses for Local Resources.

The following article signed by I. Zobov, Secretary of the Ulan-Ude City Committee for Industry and Transport of the Communist Party, appeared in *Pravda* on October 14, 1941.

During the war the industrial executives, specialists and Stakhanovites of Buriat-Mongolia have made wide use of the resources of raw materials with which our Republic is so richly endowed.

Quartz sands were formerly imported from Irkutsk Oblast, ferro-silica from Zaporozhe, *pek* for electrodes from Kuzbass, silica-brick and *chamotte* from the Donbass and the Ural. All these long hauls were a heavy load on the railroads. The flow of industrial raw materials from the western districts (of the country) to the main plants at Ulan-Ude totals 2,990 carloads, or 48,000,000 ton-kilometers.

Steps are now being taken to find the necessary raw materials on the spot. The plant of which comrade Semenov is the manager[6] (for a long time) received its ferro-silicon very irregularly. This, naturally, was reflected in the graph of output. Not long ago, comrade Popov, an engineer at that plant, found occurrences of quartz rock, and a group of engineers proposed that the plant arrange to fuse its own ferro-silica to free it from dependence upon long-haul shipments. The proposal was accepted and now the plant supplies its own needs for ferro-silica.

A shortage of *pek* for electrodes held up production at one important plant. Delivery from outside was continually being held up. It was proposed that wood *pek* from the gas generator furnaces of the glass factory be substituted, and experience showed electrodes made from this *pek* to be satisfactory.

Interruptions in the delivery of quartz sand was one of the reasons for a fall in glass manufacture at the mechanized glass factory. In this case the situation was not met until the city committee of the Party issued a special decision instructing that local resources be used.

Exploration resulted in the discovery of quartz sands only a few kilometers from the plant. Experiments were conducted, and now the plant is making use of that deposit. As a supplementary source of supply a quarry for mining of quartz stone is being dug, and equipment for pulverizing it is being installed.

Sulfate is being widely used as a substitute for soda. The management of the glass works has cut the need for soda by 80 per cent by procuring sulfate from nearby mirabilite deposits.

Buriat-Mongolia has an abundance of rivers. Its navigable waterways

[6] Identification by name of manager is used to avoid naming war plants.

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total five thousand miles. Until now, however, only a negligible fraction of that total has been in use.

The management of the Selenga steamship line has made a practical beginning toward the use of new routes. It has multiplied by five times the hauling of vegetables and potatoes for the urban population and the Red Army. Now preparations are being made to haul freight without transshipment from points on Lake Baikal to Ulan-Ude on the Selenga River. This will cut 30,000 tons from the freight now regularly carried by the railroad.

In Conclusion.

The Soviet Far East is, today, more closely knit to the mother country than ever before. The enemy, tempted to consider a stab at the Far Eastern backdoor, would be wise to ponder seriously the simple truths underlying the following excerpt out of a report to *Pravda* from an official in Buriat-Mongolia:

Collective farms having surpluses of grain are extending their aid to the collective farms of those districts which experience a shortage of seed because difficult climatic conditions have resulted in a poor harvest in 1941. The collective farms of Tarbagatai, Mukhorshibir, Bichur and Kaban districts, which are inhabited mainly by Russians, have apportioned thousands of tons of seed to the collective farms of Selenga, Khorin, Kizhingin, and Eravnin districts, the population of which consists mainly of Buriats, Tatars and other (minor) nationalities.

The mutual socialist assistance of the Russian and Buriat-Mongol collective farmers in the matter of seed, haulage, and cattle feed is a graphic illustration of the indissoluble friendship of the peoples of our great motherland, on a cleavage among whom the German usurpers made the error of basing their calculations.[7]

On July 6, 1943, Buriat-Mongolia marked the 20 Anniversary of its existence as an Autonomous Republic. It is not without significance that the jubilee celebration at Ulan-Ude was attended not only by Russian representatives, but by a delegation from the Mongolian People's Republic south of the Soviet border and west of Japan's positions in Manchuria. The delegation was headed by the chief of the Mongol armed forces, Marshal Choibalsan.

[7] *Pravda,* February 28, 1942.

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CENTRAL ASIA

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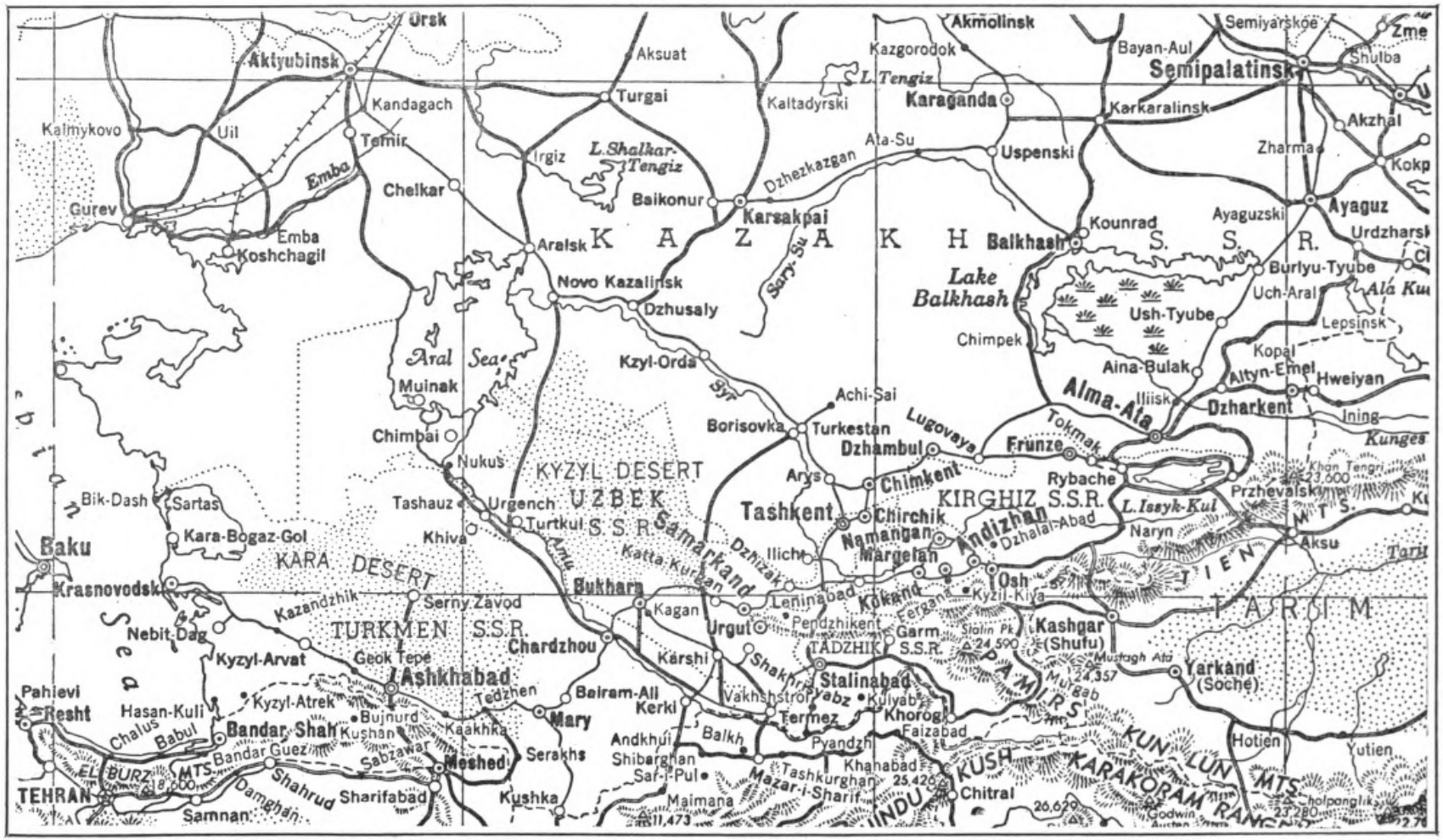

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I

THE REPUBLICS OF CENTRAL ASIA[1]

The Uzbeks, Tadzhiks, Turkmen, and Kirgiz, as well as the less numerous peoples in what was Russian Turkestan under the Tsars, have come a long way since the year 1916 when they revolted against an attempt at conscription and were suppressed by a bloody punitive campaign. At present, inhabitants of the four Soviet Republics of Central Asia are among the outstanding heroes of both the home and fighting fronts. The contribution to modern warfare that an area so recently feudal and even pre-feudal is able to make reveals the tremendous economic and cultural development that has taken place there in the last two decades. The changes are the more notable as in the Russian Turkestan that existed under a ruthless military colonial administration the rate of literacy was lower, the death rate higher, and the social customs more backward than in the western parts of the Tsar's empire. Now there are tractor experts instead of veiled women, schoolgirls instead of child wives, mechanization instead of back-breaking toil, and support of the war instead of angry revolt.

The Soviet wartime evacuation of industries, cultural institutions, skilled workers, and refugees eastward to Central Asia is accelerating a process of modernization which had advanced sufficiently far in that area before June 22, 1941 to enable it to absorb its war responsibilities. While the world's eyes were on Moscow rather than on ancient Samarkand, Tashkent, and Bokhara, the nomad peoples of Soviet Central Asia were quietly utilizing their relatively large share in the allocations of the Five Year Plans and were settling down as collective farmers. At the same time, the farmers of the irrigated valleys were learning new methods of cultivation which more than doubled the yields they obtained. Their sons and daughters, educated in the new schools, were entering the factories which competition-fearful Moscow merchants had denied to Central Asia in the

[1] Based on an article by the author entitled "Soviet Central Asia," in the *American Russian Institute Bulletin, Russia at War*, No. 26, March 18, 1942.

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past, and were producing annually manufactured goods to a value several times larger than the yield of their farm lands.

The encouragement of national self-expression politically and culturally has loosed a stream of initiative and creative energy which had flowed sluggishly since the creation of the superb mosque architecture of Tamerlane's day and the development of complex irrigation systems in these arid lands even earlier. The vigor of these peoples has manifested itself in such phenomena as the construction, late in 1939, of a 150-mile trunk-line irrigation canal in the Ferghana Valley by a volunteer army of 160,000 collective farmers who completed this job in fifty days. The improved irrigation brought about by this and similar projects as well as the reduced labor costs consequent upon the introduction of farm machinery resulted in a ten-fold increase in the cash income of the individual farm-family in a recent four-year period. In the same period industrial wages doubled. The women of Central Asia have taken advantage of their new opportunities and have by now succeeded in making their men-folk eat the ancient words of woman's inherent inferiority. On the sports field they grew strong, in the schools literate, and at bench and on the farm grew skillful enough to make large bids for the material and prestige rewards of their civilization. In their local Red Cross and Red Crescent societies they learned the techniques which enable them now to help in saving the lives of their own peoples and of the Russian people whom they once feared and hated.

In each of the four Central Asian Republics one nationality is in the majority and this fact is indicated by the name of each republic: the Turkmen SSR, the Kirghiz SSR, the Uzbek SSR, and the Tadzhik SSR. But in each republic people of many nationalities live, protected in their equal opportunities by laws punishing "any advocacy of racial or national exclusiveness or hatred and contempt." Some of these nationalities which are concentrated in one area have their own political organization within the republic; thus in the Uzbek SSR, there is the Kara Kalpak ASSR and Tadzhik, Russian and Jewish minorities, and in the Tadzhik SSR the Gorno-Badakhshan Autonomous Region and a large Uzbek minority. Each of the four Central Asian republics has equal representation with the Russian and the eleven other Soviet republics in the Council

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of Nationalities of the country's Supreme Soviet;[2] nationalities once broken up by gerrymandered boundary lines and ruled by governors and courts using a foreign tongue are now developing their own statesmen and political leaders. Moslems, Christians, Jews, Russians, Ukrainians, Mongolians, Tatars,—Soviet Central Asia is a mosaic of religions, peoples, and tongues which has gone far in solving the problems of diversity and has justified in no small measure the Soviets' concept of a nationality-based federalism.

The significance of this area to the world lies not only in its great contribution to the efforts of the United Nations but in its geographical proximity to Iran, Afghanistan, India and China, countries which daily increase in importance. Soviet Central Asia sweeps eastward from the Caspian Sea to the Chinese border. At its south it touches Iran, Afghanistan and China. India for a distance of 150 miles is separated from it only by a strip of Afghanistan territory which at one point narrows to nine miles. The Turkmen SSR borders on Iran east of the Caspian and also covers half of the Soviet border with Afghanistan. North and east of Turkmenia is the Uzbek Republic. Uzbekistan contains the bulk of the population of the Central Asian Republics in the small, irrigated valley where are situated Bokhara and Samarkand, Tashkent and Ferghana. Uzbekistan borders on Afghanistan only for a very short distance, while the eastern half of the border, including that which approaches India most closely, falls within the territory of the mountainous Tadzhik Republic. The border with China is divided between Kirghizia and Kazakhstan.

Kazakh SSR

What the RSFSR is to the Soviet Union as a whole in terms of size, the Kazakh SSR is to the Central Asian republics. This nearly-empty, semi-desert land, which has a population somewhat smaller than that of New York City in an area one-third as large as the United States, separates and yet links the oasis countries of Central Asia and the boundless forest-steppe of Siberia. When it was decided by the Soviets to bring new huge tracts of Kazakh steppe under cultivation in wartime to make

[2] 96 of Central Asia's 134 representatives in both houses of the Supreme Soviet are members of the native nationalities.

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up for the loss of the Ukraine and Belorussia, a special scientific expedition had to be fitted out to survey the lands and decide which sections could most rapidly and profitably be brought under the plow. This survey was completed in November 1941. Although its results have not been made known, it is likely that the lands selected were among those lying along the 4,000 miles of new railroads built in Kazakhstan during the last twenty years. Best-known of these roads is the Turk-Sib, built to carry Siberian grain, timber and metal to Central Asia. For the last five years, the Turk-Sib has served as China's life-line. The munitions it has carried to Alma-Ata (capital of Kazakhstan) for trans-shipment by trunk to Chungking are generally recognized as greater in amount than the total received by all other routes.

The three million Kazakhs,[3] who numbered just over half of the Republic's population before the huge influx of evacuees known to have taken place late in 1941, were formerly nomad cattle raisers. As such, they stood in sharp contrast to the peoples of Central Asia, with their long tradition of intensive agriculture based on irrigation. Today they are no longer nomads, but stock-raising remains their primary agricultural occupation. Kazakhstan now stands second only to the RSFSR in this regard (the Ukraine excluded). Kazakh wheat and sugar beet now rank high in the national total. The industries of Kazakhstan have developed even faster than the cultivation of the soil, and accounted for nearly sixty per cent of the Republic's value output in 1940, as against six per cent twenty years earlier. Moreover, industrial output in 1940 was twenty-two times larger than in 1913, showing a rate of growth twice as rapid as that of the USSR as a whole.

The new industries of Kazakhstan are of prime military importance. In 1939 the Republic's lead mines accounted for eighty-five per cent of Soviet output. Its newly-developed Karaganda coal field gives way only to the Donbass in the Ukraine and the Kuzbass in Siberia in annual output. From ninety thousand tons mined in 1913, production rose fifty times to more than four million tons in 1938, and was originally planned to increase by 1942 nearly three-and-a-half times over the 1938 figure. However, under the pressure of the war, it is probable that the plan will be exceeded considerably. This

[3] Not to be confused with Cossacks.

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would seem to be indicated by the presence at Karaganda of equipment and skilled miners from the Donbass, including the famous Alexei Stakhanov, who is now managing a colliery there.

From the oil fields at Emba on the north shore of the Caspian to the new 240,000-kilowatt water-power plant going up near the Chinese frontier,[4] from the copper refineries producing nearly a fifth of the total Soviet output to the huge new sugar and textile mills, the industries of Kazakhstan are doing their share in the Soviet war effort. Perhaps no indication of the modernization of this most primitive of Soviet Asian territories is more impressive than the fact that no city in Kazakhstan experienced less than a two-fold rise in population in the interval between the census of 1926 and that of 1939. Alma-Ata multiplied five times, to number 230,528 inhabitants in the latter year, and Karaganda sprang from the empty steppe to reach a population of 166,000.

Uzbek SSR

Where the Kazakh contribution to the war effort consists of non-ferrous metals, fuels and food, the Central Asian Republic of Uzbeks contributes industrial crops, chemicals, and, as of 1943, steel. Uzbekistan is famous chiefly for its cotton; it supplies three-fifths or more of the Soviet crop. However, this Republic's industries, centered at ancient Tashkent, had by 1938 a total output greater than the combined industries of Turkey, Iran and Afghanistan, despite the far greater combined population of these states.

Perhaps the industrial development of Uzbekistan can be depicted most vividly in terms of electric power. The total capacity of power plants in the Republic grew from three thousand kilowatts in 1913 to eighty thousand in 1937. From 1937 to 1941, at least four new projects went into operation, one of which alone, on the Chirchik River near Tashkent, is rated at an ultimate capacity of 270,000 kilowatts—more than three times the total available power before its turbines started to rotate.

[4] This would certainly seem to be one of the logical places for the installation of the huge turbines which a 1942 Soviet press dispatch announced had been salvaged prior to the destruction of the Dnieper Dam and would shortly be in use again. The Chirchik development, mentioned below, would be another.

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The Chirchik plant was originally designed primarily to provide power for a huge nitrogen fertilizer works. Today this enterprise is undoubtedly producing munitions.

A description of the Uzbek Republic in wartime which appeared in *Pravda*[5] over the signature of the head of the Uzbek Communist Party provides not only facts of interest but gives something of the spirit of the people.

"Since the outbreak of the patriotic war, the Uzbek people have subordinated all their work to the interests of the front, to the purpose of defeating the enemy. We have assembled machinery and put into operation in record time scores of first-rate industrial enterprises evacuated from the front zone. Many of them are already running full blast, steadily increasing the output of articles needed for the front.

"Our geologists have discovered extremely rich deposits of iron, rare and non-ferrous metals, and veins of coal in many places. Construction of metallurgical enterprises is in progress. The day is not distant when our first blast furnace, our first open-hearth furnace and our first rolling mill will begin production.[6]

"Until recently Uzbekistan had no coal of its own. This year the Tashkent *Stalinugol* coal mines will turn out hundreds of thousands of tons of high-grade coal.

"To meet the growing demand for electric power, several hydroelectric and coal-burning power stations will be built near Tashkent within six to eight months. The Ferghana Valley, Southern Uzbekistan and the Bokhara Steppes contain immense reserves of oil. This year we shall obtain at least two-and-a-half times as much oil as in 1941.

"Uzbekistan's agriculture is mobilizing all its resources. This year, without reducing cotton acreage, we shall plant 170,000 acres to sugar beet. Several sugar mills are being equipped in the Republic. The area under grains is being increased by about a million acres.[7]

"Extensive irrigation work is being conducted throughout Uzbekistan. We have begun construction of the Northern Tashkent Canal to irrigate 120,000 acres of fertile land now uncultivated. This area will be used as a base for production of food-

[5] March 9, 1942.

[6] This will be the first and only steel mill in all of Central Asia.

[7] Representing an increase of more than twenty-five per cent in a single year.

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stuffs for the working people of Tashkent, Moscow and Leningrad, and also for the front.

"Popular initiative manifests itself in every direction. The campaign of assistance to evacuated children, now in full swing, was launched here on the initiative of the population of the Yangiyul District. Scores of collective farms have equipped children's homes, and the working people of the Republic have adopted thousands of evacuated children who suffered the atrocities of the fascist barbarians. The population shows great solicitude for people evacuated to the east, providing them with foodstuffs, clothing and dwellings.

"Collections for the Defense Fund continue with great success. By February 1st, 1942, the Uzbek people had contributed 52,000,000 rubles in cash, 300 tons of grain, 219 tons of meat, 2 tons of wool, about 19,000 sheepskins and many other things. By the end of January, 188 carloads of presents for our troops had been dispatched to the front."

Uzbekistan has become not only an arsenal and a haven for refugees, but it has gained culturally with the transfer of famous scientific institutions, universities and theater companies from Russia, Belorussia and the Ukraine. Numerous reports have also been received of the evacuation of people from the Baltic States to this and other Central Asian Republics.

The Border Republics

The three remaining Central Asian Republics—Turkmenia, Tadzhikistan and Kirghizia—have a combined population smaller than that of Uzbekistan. Their scale of economy is likewise smaller. On the other hand, their strategic position is great, by virtue of the fact that they are border states. Their importance as possible or actual supply routes is equally worthy of attention.

The Turkmen SSR consists mainly of desert lowlands, the Tadzhik SSR and the Kirghiz SSR largely of desert highlands—the Pamirs and the Tien-Shan range. However, the chemical and petroleum industries, the mining of rare and non-ferrous metals, cattle-raising, and grain and cotton farming on reclaimed lands, have recently undergone considerable development. Turkmenian oil and Kirghiz coal play a large part in the economy of Central Asia. A railroad from Krasnovodsk on the Caspian parallels the Iranian border. Its extension, built under

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the Soviet regime, parallels the western section of the Afghan border. The eastern section of the Afghan border, the 20,000 foot high "Roof of the World" (the lowest point in the valleys of the Pamir is 13,124 feet above sea level) is now paralleled by a remarkable Soviet highway, 468 miles long, which curves north to Osh on the railroad.

Widely-separated customs-houses at Kushka, Kerki and Termez mark the only roads into Afghanistan. However, Afghan motor roads (the country has no railroads) do permit direct, if tortuous and difficult, contact between India and these Soviet border railway stations.

Even this wild and remote region participates in the Soviet war effort. Tadzhik shepherds taught to recognize valuable ores, have recently discovered rich deposits of non-ferrous metals high in the Pamirs. Hundreds of peasants braved the mountain blizzards during the winter of 1941 to begin the excavation of these ores. A mining camp was thrown up in ten days and mining machinery is already in use, evidently brought in by plane or on camel-back, as a road to the new diggings is still under construction.

The Tadzhik Republic as a whole may serve as an example of how the home front in a former colonial area has responded to the war. On November 24, 1941, *Pravda* reported that Tadzhikistan had turned in its full cotton quota 33 days ahead of plan. The grain quota also had been delivered prior to the deadline date. Livestock herds had grown more rapidly than had been foreseen in the annual plan, and reports of industrial enterprises fulfilling their annual production schedule, with more than a month of the year still to go, were being received daily. As for small enterprises catering to the needs of the local population, their output during the first nine months of 1941 had more than doubled by comparison with the same months of the previous year. One of Tadzhikistan's cultural contributions to winning the war was a successful tour by its leading actors and musicians throughout Iran last November; they built up a fund of good will at a time when Great Britain and the Soviet Union were arranging a military treaty with that strategically situated country.

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II

HISTORY[1]

Tsars, Khans and Wars

Central Asia is the area of historical settlement and numerical preponderance of the Uzbek, Tadjik, Kirghiz, and Turkmen peoples. Bordering China's Sinkiang Province hundreds of miles in the east, it reaches to the Caspian Sea opposite Baku.

The northern limits of Central Asia extend almost to the Trans-Siberian Railroad and intersect that line in the vicinity of the city of Petropavlovsk in the Kazakh Republic. The center of population, economy and culture lies in the fabulously fertile irrigated lands around Tashkent. Tashkent, fifth city in the Soviet Union, is the industrial and cultural capital of Central Asia, as well as the administrative capital of its most populous and developed republic, the Uzbek SSR. It is in this southern area, where native populations are overwhelmingly in the majority, that Tsarist colonial and Soviet nationality policy have met their severest test—the test of war.

Tsarism did not undertake the conquest of ancient Central Asia until the sixties of the last century. The social structure of the territory it conquered between 1860 and 1885 remained largely unchanged during the half century of Tsarist domination. Its system of land tenure, which lay at the basis of its economy and history, was not replaced by that instituted by the Soviets in the rest of the USSR until 1925, eight years after the Bolsheviks came to power in Russia and five years after Soviet rule was established in the heart of Central Asia.

This social structure was typically "Asiatic." Based on a complex irrigation system and a high density of population in the arable oases, its prosperity hinged on the maintenance of the irrigation canals. Land tenure was feudal, and yield and population rose and fell with the changing relationships between feudal lords and the central monarchy. When the central

[1] Based on article by the author "Soviet Central Asia," in *Pacific Affairs*, December, 1942.

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Territorial-Administrative Divisions of
Soviet Central Asia, January 1, 1914.

Territorial-Administrative Divisions of
Soviet Central Asia, June 1, 1938.

American Quarterly on the Soviet Union

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government was strong, the canals were maintained and agriculture flourished. When local lords—beks—felt themselves strong enough to challenge or replace the central authority, agriculture declined, particularly if the wars were of long duration.

The Khiva and Bokhara Emirates were the strongest of the Central Asian states at the time of the conquest. Because of their strength, a colonial policy similar to that of the British in nearby India was followed; these states were not simply destroyed and incorporated into the Empire as were those centered at Kokand, Khorezm and Merv. Instead, they were dismembered, their most productive areas, Samarkand and the Ferghana valley, were taken over directly by the Russians, and the remainder subjected only to economic penetration and indemnity. The Emirs remained and became loyal vassals of the Tsar, whose "native states" policy permitted them to continue to enrich themselves at the expense of their subjects. For example, the Emir of Bokhara possessed, at the time of his flight in 1920, a personal fortune in bullion and gems of $175,000,000, although the population of his fiefdom was smaller than that of New York City and its economy infinitely less productive.

This fortune, and the solid possessions of his lords religious and temporal, the beks and the mullahs, were based on the following system. Huge tracts of land belonged to the Emir as such, as the chief feudal lord, and the income from them went into his personal treasury. There were also lands that were the hereditary possessions of the beks and others that belonged to the mosques and religious schools of this Mohammedan country. The land was worked generally on a share-cropping basis, with the peasant, dekkan, retaining only one-fourth of the crop. Most cruelly exploited were those on lands granted by the Emir to his favorites. These grants were for definite and limited periods of time, during which all income and taxes went to the temporary lord. In addition to the unbearable conditions of rent and share-cropping, the dekkans, including those who had their own land, paid all sorts of feudal dues. Moreover, there were labor services to be performed in the building and dredging of irrigation canals, road and bridge maintenance, and the construction and repair of the walls of the fortified cities. In addition, the peasantry bore the burden of maintaining the

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administrative hierarchy, which received no salary from the Emir, but waxed fat on the imposition of all sorts of bridge and ford tolls, milling and weighing taxes, and court fines, of which the judge retained a definite percentage! Outright slavery, based on prisoners of war and the poorest peasantry, also existed as did primitive communal land ownership in the most backward areas. In the cities there were tradesmen and artisans. Feudal relationships, however, were dominant, and all other forms of economy paid tribute thereto.

After the conquest, both the peoples of the native states of Khiva and Bokhara and those inhabiting the bulk of Central Asia, which was organized as the General-Governorship of Turkestan (the resemblance to Hitler's device of the gouvernement-generale is more than verbal) underwent even more severe exploitation by government and economy. The Tsar's taxes on the population of Russian Turkestan were between 50 and 150 per cent higher than those leveled upon the none-too-liberally-treated people of European Russia. While the Tsar's tax-collectors took the place of the Emir's, where these had been overthrown, down below the social system remained unchanged. The Russian officers who took the place of the Emir's beks sold supposedly elective lower offices to the highest bidder, and the native lordlings who won in these clandestine auctions made sure to get back their investment and a sizable profit from the dekkans—the peasantry.

In addition to the dividing up of the territory of Central Asia into "native states" and Russian Turkestan, the native peoples were rendered still less able to organize themselves for independence by a gerrymandering of boundary lines which split every local nationality into a number of groups, each with a different type of government to face.[2] This situation had existed even before the conquest, as a result of local wars, but it was infinitely worsened under the new regime. The Uzbeks, who were the bulk of the population in Khiva and Bokhara, were now split further by the organization of Samarkand and Ferghana and Syr-Darya Oblasts in Turkestan, of which the last-named was primarily Kazakh territory. The Tadjiks, occupying the mountain country nearest to India, were divided between the Emirate of Bokhara, to which they had all previously been subjected, and Ferghana Oblast in Turkestan. The

[2] See maps, p. 98.

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Kirghiz were divided between the Ferghana and Semirechie Oblasts, the latter being inhabited largely by Kazakhs. The Turkmen were almost all within the Trans-Caspian Oblast of Turkestan, which also contained numbers of Uzbeks, Kazakhs, and Kara-Kalpaks, one of the minor nationalities of the east. In each of these areas, existing and artificially fostered enmities among the various peoples resulted in the creation of a communal problem which further complicated the struggle against the conqueror.

Into this melange of nationalities there came the Russians, Tsarist administrators, Cossack colonizers to hold the territory, adventurous well-to-do farmers seeking broader fields for their enterprise, and the poorest landless peasants being resettled both to quell discontent at home and to provide a bulwark against the native peoples. Upon their heels followed the merchants of manufactured goods and vodka, and the buyers of raw materials.

The bulk of these colonizers came for land, and the Tsar gave it to them by the simple process of taking it from the native peoples. In the territory of present-day Kazakhstan alone, 100,000,000 acres were thus colonized, and the same process took place in Central Asia. The sufferers were mainly nomadic peoples, and the whole process was not unlike, though incomparably more painful than, the treatment of the American Indians. Driven into the desert, the nomads' cattle died off, and their masters followed soon after. Between 1902 and 1907, the Kirghiz' cattle herds decreased by 27 per cent, and the number of the Kirghiz people itself is estimated to have dropped by 7 to 10 per cent in the years 1903-1913.[3]

More important than the policy of colonization was the economic policy pursued in the areas of settled agriculture. In these, the irrigated areas of the extreme south, cotton had been grown from time immemorial. So anxious was Russian capital to secure this raw material, and to safeguard its border with Iran, that a railroad was built from the eastern shore of the Caspian as fast as the troops occupying Central Asia from that direction were able to advance. However, the cost of transshipment on the Caspian and the growing need for cotton led in the first decade of this century, to the construction of a direct line across the steppes from the end of track at Orenburg (Chkalov)

[3] *Bolshaia Sovetskaia Entsiklopedia,* vol. 32, p. 377. Ogiz, Moscow, 1936.

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in the southern Urals to a junction with the Trans-Caspian line at Tashkent.

Prior to the conquest, cotton-growing had been one of many cultures in Central Asia and fabric had been woven locally, as in India. Cheap manufactured textiles soon drove the local product off the market, and placed the cotton-grower at the mercy of the Russian buyer. The latter extended credit to the peasants at rates of four per cent *per month* and more. The peasantry was forced into cotton growing both by the need of ready cash resulting from the disruption of the self-sufficient village economy under the flood of Russian goods, and by the pressure of the beys. The large landowners were recruited as middlemen, buyers and ginners by the Russians after early attempts to institute the plantation system had failed. Thus, although the economy changed rapidly from one which was self-sufficient in food products to a one-crop system, the area under American types of cotton rising from 750 acres in 1884 to 160,000 in 1890, the bey-dekkan relationship remained. As a matter of fact, this relationship was strengthened for the independent peasantry rapidly lost most of their land under the usurious terms of credit, and became sharecropers of the type described above. As in the American South, sharecropping and credit to an illiterate peasantry resulted in very little actual cash ever coming into the cropper's hands. However, the Central Asian system was distinctive and more stable because the bulk of the croppers were neither slaves nor entirely landless. Generally they retained the plot on which their home was built and their own wooden plow and working animal. As a result, their sense of property, bound up with their feudal and religious loyalties and the fact that they continued to work for a number of their own nationality and in a form of labor hallowed by tradition, created a firm wall of resistance to change.

The extreme and ever-deepening poverty of the mass of the native population gave rise to numerous outbreaks and rebellions. Among the Uzbeks, such minor revolts took place in 1885, 1892, 1893, and 1898. In 1904, Russian railway workers organized the first groups with definite and clear-cut revolutionary aims, and both Russian and native workers took part in the nation-wide general strike of October 1905.

It took the World War, however, to bring out the real sentiments of the native population. Despite its huge population, unproductive and backward Russia experienced a manpower

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shortage from the beginning of the war. This situation was worsened by the huge losses inflicted on the ill-equipped Russian Army in its offensives into East Prussia and elsewhere, which diverted large German forces from the Western front. As a result, the Tsar was compelled, in June 1916, to issue an edict decreeing the mobilization of the colonial peoples for work in the rear of the army. Central Asia was to provide 250,000 men.

The very attempt to mobilize the natives for service in the armed forces of the hated Tsar added insult to injury. But with a fine disregard for the most elementary needs of these peoples, the Russian authorities proceeded to carry out the mobilization at the height of the farming season.

Central Asia burst into flame. Having no unified organization or plan of action, but determined not to leave their native soil to work for the army of their conqueror, the native peoples, settled and nomad, in town and country, took up arms to prevent the conscription of their men. The rebellion, which began in July, was finally put down in November of 1916. The terror which accompanied its suppression was so great that fully a million nomad Kirghiz and Kazakhs fled into Sinkiang. Yet the Tsar was able to conscript only 120,000 of the 250,000 workers whom he had hoped to get.

The Central Asian rebellion has a significance in modern world history that is little appreciated. It was the first serious crack in the structure of the Russian monarchy and was, in effect, Central Asia's contribution to the overthrow of the Tsar the following spring. The fact that fully eight million[4] of the eleven million native inhabitants of the area participated in it in one form or another indicated an emergence into political life of huge masses of the most backward people. Their participation predisposed these national groups in favor of the Bolsheviks in the subsequent struggle between the Soviets and the White armies striving to restore the monarchy. It also predetermined the character of the political problems to be faced by the Bolsheviks in that area, for it marked the growth of a national self-consciousness among these peoples, if as yet only in the negative form of unification against the Russian conqueror and his local agents.

Unpopular as was the attitude of the Provisional Government existing between March and November 1917 on the issues

[4] *Istoriko-Revoliutsionnyi Kalendar,* 1940, p. 406. Ogiz. Sotsekgiz, Moscow.

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of ending the war, satisfying the peasants' land hunger and meeting the food shortage in the cities, its colonial policy was even more inept and less distinguishable from that of the Tsar it replaced. This was demonstrated most flagrantly in the native state of Bokhara, where the Provisional Government even permitted the Tsarist "adviser," Miller, to retain his position, and contented itself with sending a dispatch to him and the autocratic Emir urging democratic reforms. In Kirghizia, the seizure of native lands, cattle and property continued. The new governments in Turkestan and the Steppe consisted of a melange of officials of the Tsarist resettlement administration, Russian and native merchants, native elders and well-to-do Russian farmers. Neither the Russian railway workers, who desired a socialist regime, nor the soldiers stationed in the Central Asian garrisons, who were suffering from the food shortage, nor the poorer and particularly the more recently arrived peasant settlers, were satisfied by this transfer of power from the more distant to the more immediate oppressor. As for the native majority of the population, the situation had changed only in that the new administration used gentler words.

With the overthrow of the Tsar, and parallel to the formation of the local organs of the Provisional Government, Soviets, bodies of elected workers' and soldiers' delegates, sprang up in some of the railroad cities of Russian Turkestan. Central Asia, which had anticipated the overthrow of the Tsar with its rebellion of 1916, anticipated the taking of power by the Soviets, for the Tashkent Soviet had declared itself the sole rightful organ of government on September 12, nearly two months before the revolution in the capital. Suppressed by troops under the control of the Provisional Government, the Soviets took power again in a bitter four-day street battle during the week after Lenin's government was established. The battle was decided by the support of the Uzbeks and Kirghiz from the Old City and surrounding villages. On the other hand, the Khiva and Bokhara Emirates continued to exist for three years; and it was five years before the last serious opposition government ceased to exist along the Afghan border.

Revolution and Peace

The Bolsheviks began with two strikes against them. For in most of Central Asia, there was no political party or grouping even to attempt to bring to the people an idea of what they

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proposed to do. Nineteen out of twenty of the local population were illiterate, while the twentieth came from one or another exploiting group, and the Russian workers were unfamiliar with the native tongues. Only around Tashkent, and in the Ferghana valley, where there were Russian workers in the railway shops and the influence of capitalism upon cotton-growing and urban life had been most marked, did Soviets appear. There, the elimination of the most flagrant abuses of Tsarist rule, the introduction of some democratic processes at least in the cities where the Soviets held sway and the meeting of certain elementary economic needs held the loyalty of the people through the turmoil of the succeeding years.

The struggle for popular support in Central Asia was three-sided. There were the Bolsheviks, the feudal reactionaries and the nationalist bourgeoisie. The Bolsheviks' chief weapon was their policy of national equality. The feudalists had the power of tradition and religion. The bourgeois nationalists had the native peoples' hatred of all things Russian. The latter two groups also had in varying degrees the military power of the Russian restorationist forces and of foreign intervention. Later, there was a measure of unity between them against the common enemy, the Soviets.

The making of Bolshevik nationality policy is intimately bound up with the name of Joseph Stalin, himself a member of an oppressed nation, coming from an area which probably has the most complex mixtures of nationalities and religions of any on earth, the Caucasus.

From 1912 on, he was the recognized Bolshevik authority and its chief policy-maker on the problems of national minorities. This policy was first defined as granting to each nation the right to full self-determination. Later, this statement was rendered more concrete by the unequivocal guarantee that any nation which so desired could secede from the Russian state.

Stalin entered the first Soviet Cabinet as People's Commissar of National Affairs, and his first act in this capacity was the issuance, within a week of the formation of the Soviet Government, of a "Declaration of Rights of the Peoples of Russia." The pertinent portions of the Declaration, which appeared over the signatures of Stalin and of Lenin as Premier, read as follows:

In June 1917, the First Congress of Soviets proclaimed the right of the peoples of Russia to freedom of self-determination. In October 1917 the Second Congress of Soviets endorsed this inalienable right of the peoples

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of Russia in a more decided and definite form. In pursuance of the will of these congresses, the Council of People's Commissars has decided to base its activities with regard to the nationalities of Russia on the following principles:

1. The equality and sovereignty of the peoples of Russia.
2. The right of the peoples of Russia to freedom of self-determination, including the right to secede and form independent states.
3. Abolition of all national and national-religious privilege and restrictions whatsoever.
4. Freedom of development for the national minorities and ethnographic groups inhabiting the territory of Russia. . . .

The policies herein enunciated were given the final, concrete form under which the Republics of the USSR have since been constituted in an edict of the Third Congress of Soviets of January 24, 1918. This edict was drafted by Lenin, with Stalin's assistance, and became the main section of the first Soviet Constitution adopted six months later.

The Russian Soviet Republic shall be constituted on the principle of a free union of free nations, as a federation of Soviet national republics. . . .

Endeavoring to create a really free and voluntary, and therefore more complete and stable, union of the toiling classes of all the nations of Russia, the Third Congress of Soviets confines its own task to the establishment of the fundamental principles of a Federation of Soviet Republics of Russia, while leaving it to the workers and peasants of each nation to decide independently at their own authoritative Soviet Congress whether they shall participate in the federal government and in the other federal Soviet institutions, and on what terms.[5]

The history of the establishment of Soviet rule in Central Asia may be summarized in the contrast between the precise statement of what was to be done, as indicated in the foregoing laws, and the difficulties encountered in carrying these policies into action as stated by Stalin in an article in *Pravda* nearly three years later.[6]

The proclamation of one form of Soviet autonomy or another, the enactment of corresponding decrees and ordinances, and even the creation of governments in the border regions in the shape of regional Councils of People's Commissars of the Autonomous republics, are far from being all that is required to consolidate the alliance between the border regions and the center. In order to consolidate this alliance, it is first of all neces-

[5] *The Communist International*, Vol. XIV, No. 12, December 1937, pp. 867, 875, 876.

[6] *Marxism and the National Question*, by Joseph Stalin. pp. 76-81. International Publishers, New York, 1942.

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sary to put an end to the estrangement and isolation of the border regions, to their patriarchal manner of life and lack of culture, and to the mistrustful attitude towards the center which still persists in the border regions as a heritage of the brutal policy of Tsarism. . . .

In order to remove this mistrust we must first help the populace of the border regions to emancipate themselves from the survivals of the feudal-patriarchal yoke; we must abolish—abolish in actual fact and not in word—all the privileges of the colonizers; we must enable the masses to taste of the *material benefits of the* revolution (my emphasis—W.M.). In brief, we must prove to the masses that Central, proletarian Russia is defending their interests, and their interests alone; and this must be proved not only by resorting to repressive measures against the colonizers and the bourgeois nationalists, measures that are frequently incomprehensible to the masses, but primarily by a consistent and well-conceived economic policy. . . .

Communists in the border regions . . . must put universal education into effect if they want to end the ignorance of the people and if they want to create closer spiritual ties between the center of Russia and the border regions. But in order to do so we must develop local national schools, national theaters and national educational institutions and must raise the cultural level of the peoples of the border regions. For it need hardly be shown that ignorance and unenlightenment are the most dangerous enemies of the Soviet Government. . . .

. . . all Soviet organs in the border regions—the courts, the administration, the economic bodies, the direct organs of government (as also the organs of the party)—should as far as possible be recruited from among local people acquainted with the customs, life, habits and language of the native population, that the best people from among the native masses should be got to participate in these institutions.

It was against the background of economic, political and social backwardness, in some cases even pre-feudal, i.e., patriarchal, in character, of civil war and intervention, of mistrust on the part of the native peoples and Great-Russian chauvinism on the part of some Soviet authorities as well as their sheer ignorance of the customs and languages of the native peoples, that the struggle for the application of Soviet nationality policy went on. It was on the basis of the methods Stalin outlined, of turning over the administration to people of these nationalities, utilizing elements of all classes who were willing to co-operate, and bringing to the people the material benefits of the revolution, that the Soviets won out.

The most striking fact about the Soviets in the Turkestan SSR centered at Tashkent is that no attempt was made to interfere with feudal ownership of land and water for four years after the Bolsheviks came to power. This was true not

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only during the first two years, when matters were in the hands of the handful of local Communists, but also for two years after the visit to Tashkent, in 1919, of a commission of outstanding Bolsheviks, including L. M. Kaganovich, now a member of the Soviet war cabinet, Frunze, founder of the Red Army, and V. V. Kuibyshev. The reason was that the traditional and religious authority of the feudal lords, the beys and mullahs, was virtually unbroken. The idea of taking the land of the bey, or even worse, that of the mosque, was as foreign to the mind of the dekkan, and as immoral as the seizure of his land by the Russians had been. Moreover, ties were not only feudal, they were patriarchal: bey, mullah and dekkan belonged to the same tribe or clan. A period of education and practical elementary training in democracy would have to come first.

On the other hand, the opportunity for unbridled development of capitalism for which the nationalist bourgeoisie, the ginners of cotton and traders in wool, had hoped and even fought during the time of the Tsar disappeared with the coming of the Bolsheviks to power. These elements, literate, aware of the course of events in European Russia, and hearing from the local Bolsheviks their plans for development toward socialism, united with the beys and mullahs, who also saw the writing on the wall, to forestall the Soviets. Thus were formed the bands of Basmachi who terrorized Central Asia until as recently as 1931 and had held important territories until 1922. Those who realized the futility of this type of resistance accepted and retained the posts in government which the Bolsheviks were only too glad to give to local intellectuals, but used these positions to organize resistance to the Soviets until finally exposed by the 1936-1938 trials.

To Kazakhstan, the sparsely-settled area north of Central Asia, the Soviets came more or less by infiltration. Proximity to both Soviet and White restorationist rule in Siberia compelled the Kazakhs to make a choice. They joined partisan bands operating against General Kolchak and made such demands upon the government of the nationalist bourgeoisie and chieftains that the latter was compelled to place itself under the protection of the Russian Whites. Thus, lines were clearly drawn. But, just as no attempt was made to divide the land in the agricultural sections of Central Asia for fear of further antagonizing a population that mistrusted any proposal coming from

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Russians, so the Bolsheviks, upon consolidating their rule in Kazakhstan, granted amnesty to all who had been active in the nationalist movement.

The last strongholds of feudalism in 1920 were the "native states" of Khiva and Bokhara. They had held out the longest because as native states, they had suffered least from Tsarist interference with old loyalties and traditions. Now, however, the Soviet policy of offering national independence without making it conditional upon the acceptance of a new economic or social order began to bear fruit. The Young Khivans, a party of nationalist bourgeois intellectuals, having learned from the experience of 1918-19 that absolute independence for a land the size of theirs was a fiction, and that if they did not join forces with the Soviets they would be gobbled up either by the Whites, or by a foreign power, and probably by both, cast their lot with the Soviets. Calling themselves Bolsheviks in their enthusiasm for the policy of democracy and self-determination as they had seen it applied, they actually desired that policy not to go beyond the overthrow of feudalism and the establishment of full freedom for private enterprise. They succeeded in unifying almost all classes in Khivan society against the Turkmen Khan who had overthrown the Khivan Emir some time earlier, ousted him and organized a revolutionary government, centered at Khorezm.

Lastly, the Bokharan nationalists, who had fled to Tashkent after the failure of an earlier attempt to oust their Emir, felt that the time had come to raise the banner of revolt in this remaining enclave of feudalism. Supported by the Tashkent Soviets, they rallied the poorest sections of Bokharan society on the evidence of the improved conditions of the peasantry in the areas under Soviet rule and the increasing number of natives in responsible government positions. At the end of August 1920, revolts throughout the Bokharan state overthrew the power of the Emir, but the city of Bokhara itself was not taken until Red forces from Tashkent overcame the fierce resistance of the inhabitants, most of whom had been roused against the new government by the Emir and the mullahs.

The new governments in Bokhara and Khorezm were unique in that they constituted themselves Soviet Republics, not *Socialist* Soviet Republics, as was the case everywhere else where the Soviets came to power. In both cases, The Council

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of People's Commissars consisted almost entirely of natives, and the independence of these states in internal affairs was complete. On March 4, 1921, close relations existing between the new Bokharan state and the Russian Soviet Federated Socialist Republic were formalized in an agreement in which the latter recognized "without reservation, the self-government and complete independence of the Bokharan Soviet Republic, with all the consequences deriving therefrom." In addition to settling questions of boundaries, mutual military aid and the co-ordination of economic policy and plan, it was agreed that "the RSFSR shall lend its assistance to the BSR for the establishment and development of the industrial and other economic enterprises by putting at the disposal of the latter all necessary materials, implements of production, and the like . . ." Furthermore, "in order to give the BSR immediate assistance in respect to current necessities, the RSFSR lends to the BSR an unredeemable subsidy."[7]

The non-socialist character of the Bokharan Republic was evident from its first political and economic measures. True, the richest merchants, mullahs, and ex-officials of the Emirs were not allowed to vote or stand for election to the first All-Bokhara Congress of Soviets. The masses of the people experienced only such an improvement of their position as resulted from the confiscation of the property of the Emir and his highest officials and the abolition of the old taxes. In order to control private speculation and the influx of foreign goods, a state monopoly for the purchase and sale of agricultural products and improving the exchange of commodities with Soviet Russia was established.

Even these controls were opposed by the beys and mullahs, who used every trick to retain their position and influence. Chief of these devices was mass entry into the Communist Party and the organs of government, an effort in which they were quite successful. On the other hand, the Basmach movement gained new recruits from the classes fearful of being displaced, and reached its height under the adventurer Enver Pasha in 1921 and 1922. Enver Pasha succeeded in achieving a temporary unification of all anti-Soviet forces under the slogan of erecting

[7] Quoted in *Dawn Over Samarkand*, by Joshua Kunitz, pp. 127-128, Covici-Friede, New York, 1935.

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a Pan-Islamic state, utilizing for this purpose the remaining distrust of Russians and the numerous administrative and political errors made by local Soviet authorities.

However, by 1921, the very year that Enver Pasha made his bid for power, the Soviet Government felt that it had won sufficient support among the native population in parts of Kazakhstan and Kirghizia, the places where Soviet rule was longest established, to undertake a land reform which meant, in essence, the overthrow of feudalism. The lands of the beys and the mosques were divided among the poorest peasantry, and in those areas where the Tsarist policy of colonization had been pursued, particular care was taken to guarantee that the lands of the wealthier Russian peasants, the kulaks, were restored to their original owners. Although neither Bokhara, Khorezm or the Turkmen territory near the Caspian were as yet ready for this step, it dealt a blow to Enver's hopes by drawing a sharp line between the vast mass of the population of those territories where the reform was carried through, and the handful of beys and mullahs.

Meanwhile, steps for the economic rehabilitation and cultural progress of Bokhara were being pushed energetically. After a party purge in 1922 which cleaned out the beys and many of their agents, trade improved, the area under crop, which had fallen throughout Central Asia by two-thirds during the Civil War, increased, an apparatus of administration was organized, and irrigation canals, ways of communication and transport were rebuilt. In 1923, a fourth of the state revenues in Bokhara was devoted to education, and the first real dent was made in the illiteracy. Twenty-four medical specialists, 136 general practitioners and 154 nurses were assigned to Bokhara by the RSFSR during the same year, under the agreement on assistance concluded in 1921. By 1923, labor unions, previously unknown, had reached a membership of 12,000, and their members helped the newly-organized Peasants' Union to convince the peasantry that their interests differed basically from the beys'. As a result, the Basmachi, who previously could count on the neutrality, if not the actual support, of the peasantry, now found "their own" dekkans hunting them out of the hills. By 1924, the acreage sown to cotton had doubled again by comparison with 1923

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(during the Civil War the cotton lands were sown to grain, due to the disruption of communications with Russia).

Nations Emerge

While economy improved, the advance in education and in the involvement of the Central Asian peoples in public life resulted in an increasing national consciousness. Previously the desire had been to put an end to Russian domination; now each nationality began to demand its own national unification. The existing state boundaries, carried over in part from the heterogeneous native states, themselves formed by conquest and in part from the gerrymandered Tsarist Oblasts, gave rise to friction. In 1923, Kirghiz, Kazakh and Turkmen Congresses had been held, composed of delegates from these minority nationalities living within the Bokharan Republic, which was inhabited mainly by Uzbeks. These Congresses, and similar meetings held in Turkestan, made it clear that each native people now desired its own state.

The problem was met by a national delimitation in 1924, based on the principle, enunciated in 1917, that state boundaries shall be determined by the will of the peoples themselves. This delimitation was made possible by the fact that the advances in economic and political organization and social consciousness in the Khorezm and Bokhara Republics led the peoples of these areas to choose a socialist course of development and thus became eligible for incorporation into the newly-formed USSR. At the end of 1922, in proposing the unification of the RSFSR, the Ukraine, Belorussia and the Trans-Caucasian Federation—Armenia, Georgia and Azerbaidjan—formerly linked by treaty, into a single Union, Stalin had said: "Two independent Soviet Republics, Khorezm and Bokhara, which are not socialist republics, but people's Soviet republics, for the time being remain outside the union for the sole and exclusive reason that these republics are not socialist. I do not doubt, comrades, and I hope that you also do not doubt, that these republics, as they internally develop towards socialism, will also come to form part of the confederate state which is now being constituted."[8]

[8] *Marxism and the National Question,* p. 123.

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The economic progress of the preceding years, and the demand for the formation of national states, led the All-Bokhara Congress of September 1924 to declare Bokhara a socialist republic. The Congress also went on record for the unification of its predominantly Uzbek portions with the Uzbek areas of Turkestan in a single Uzbek Soviet Socialist Republic, urged that the Pamir mountain area in the south be set up as a Tadjik Autonomous Republic within Uzbekistan, and agreed to the separation of the predominantly Turkmen areas for unification with Trans-Caspia into the Turkmen Soviet Socialist Republic. Thus, the Bokhara and Khorezm multi-national Republics disappeared, and in their place there were organized the first two constituent republics of the Union in Central Asia—Uzbekistan and Turkmenistan, including large parts of what had been the Autonomous Turkestan republic of the RSFSR. Two years later Turkestan was dissolved into the Kazakh and Kirghiz Autonomous republics. In 1931, the Tadjiks, who had formed an Autonomous republic within Uzbekistan, were raised to equal status as the seventh Union Republic, but it was not until 1936, after the nomad Kazakhs and Kirghiz had been won over to a settled mode of life, that they attained equal statehood. It is most interesting to read Stalin's comments on the significance of this delimitation of national states. Speaking in 1925 to the University of the Peoples of the East, a special institution set up to train governmental and party executives from among these nationalities, he said:

> I think that the recent delimitation of national frontiers in Turkestan may be regarded as an excellent example of how the Soviets can be brought into closer touch with the masses. The bourgeois press regards this delimitation of frontiers as 'Bolshevik trickery.' Yet it is clear that this is a manifestation not of 'trickery,' but of the profound aspiration of the masses of the people of Turkmenistan and Uzbekistan for their own organs of government which shall be close and comprehensible to them. In the pre-revolutionary era, both these countries were torn into fragments, into various khanates and states, and were a convenient field for the exploitatory machinations of the 'powers that be.' The time has now come when these scattered fragments can be reunited into independent states, so that the toiling masses of Uzbekistan and Turkmenistan can be united and welded with the organs of government. The delimitation of frontiers in Turkestan is primarily the reunion of the scattered parts of these countries into independent states. The fact that these states then desired to join the Soviet

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Union as equal members thereof merely signifies that the Bolsheviks have found the key to the profound aspirations of the masses of the East, and that the Soviet Union is the only voluntary union of the toiling masses of various nationalities in the world.

End of Feudalism on the Land and in the Family

Until the formation of the national states, old hatreds consciously kept aflame by the feudal heads of clans and nationalist intellectuals, served to maintain virtually a solid wall against Bolshevik attempts to drive a wedge between dekkans and beys, except where the latter had joined the Basmachi in open opposition to the new regime. The delimitation of national territories served both to win further support for a government which had taken so bold a step, and to turn the attention of each nationality inward, toward the solution of its own problems, rather than outward, towards its relations with other nations, as had previously been the case.

Here the peasants' union—Koshchi—came to the fore. In existence since 1919 in Turkestan, and from a later date in the former native states, they had previously made clever use of the actual shortage of land to bring to the peasants an elementary feeling of common interest against the beys. Against what appears to have been an economic strike comparable to that waged by the grandees of Spain against the government of the People's Front, the Koshchi had raised the slogan of "full utilization of the exploiters' lands." They had not challenged the right to more property than one could oneself make use of, except as a long-term aim, but only the right to permit lands to lie idle while willing croppers went hungry for want of enough land to plant. They had also campaigned for full national equality and, therefore, shared with the Communist Party and the government the credit for having secured the erection of the national states. On the other hand, the Soviets had given them representation in those organs of government which dealt with agricultural problems for the purpose and with the result of further raising their prestige among the peasantry. Lastly, they had served as mutual benefit societies and held their membership in this manner when no other accomplishments could do so.

Now that the people's attention was no longer centered on what would in India be called communal differences, Party, Government and Koshchi went to work to finish feudalism in

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economic relations as it had already been done away with at least in the nation-wide aspects of political life.[9]

An American eyewitness of the process described it as follows:

> The first step is unionizing of farm hands and tenants (into the Koshchi, —W.M.). This is followed by propaganda on the land laws of the Soviet Union, which entitle the actual users of land to hold it direct from the government without payment of rent. When local sentiment is believed to be ripe and the local farm hands strong and courageous enough, there follows a calculated legal expropriation.[10]

The "legality" of the expropriation, however, was also dependent upon the peasants' strength. For with no records of land ownership, the acreage confiscated depended upon the testimony of the local peasantry. And that testimony hinged simply upon which side could beat the other in open battle if the Basmachi were nearby, or in secret murder once the government commission moved on to the next district.

Nationalization began in 1925 in Tashkent, Samarkand and Ferghana and was completed only in 1929 in Tadjikistan along the Afghan frontier, which the Basmachi could cross at will. The land reform was as bloody a struggle as the erection of national states had been peaceful.

The land distribution was the most profound social upheaval to take place in Central Asia. It was accompanied by the emergence into articulate political life of masses of dekkans who had permitted all the previous changes to pass over their heads. Now, however, that they were finally convinced of their right to the land they worked—and mullahs who saw the writing on the wall even quoted the Koran to prove this right—they turned out in force to make sure that, as no central records of ownership had ever been kept, no bey concealed his holdings. At the same time, the about-face on the part of the mullahs broke their charmed hold over the minds of the peasants, and

[9] Bey and mullah control of the village Soviets would appear to have been almost the rule, rather than the exception, until the land confiscation destroyed their power. This control was both an incentive to proceed with confiscation, from the viewpoint of party and government, and an obstacle to its practical realization. Little wonder that new elections to the local Soviets were conducted simultaneously with the land confiscation.

[10] *Red Star Over Samarkand,* by A. L. Strong, p. 187. Coward-McCann, New York, 1929. See also *Changing Asia,* by Egon Erwin Kisch. Alfred A. Knopf, New York, 1935, and *Dawn Over Samarkand,* by Joshua Kunitz. Covici-Friede, New York, 1935.

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opened the way to the first entry of new ideas into the home—in particular, the unveiling of the women.

The emancipation of Central Asian women was the last great blow against the old system in this area. The subjection of womanhood was not only social and moral, but economic. Silk culture was woman's work but the product was sold and the money retained by the men in the family. By encouraging silk culture, buying directly from the women, and setting up silk filature mills, the Soviets struck at the root of the question, creating a degree of economic independence that enabled women to defy husbands attempting to maintain the literal slavery that had previously existed. By 1937, women had advanced in public life to the point where they numbered 6 out of Central Asia's 34 members of the Council of the Union, and 25 of its 100 members at the Council of Nationalities in the Supreme Soviet at Moscow.

Collectivization and Industrialization

Progress after the division of the land was so rapid that when, in 1930 and 1931, the Soviets undertook the collectivization of farming, Central Asia for the first time underwent a major social change at about the same time as the rest of the country. As elsewhere, the advantages of tractor cultivation, financially available only to large groups, and the government's conscious policy of assisting collectives and prodding individuals to join by manipulation of taxes, credits and the like, brought the peoples of Central Asia into the collective farms.

However, here as everywhere else in the Soviet Union, this revolution on the land involved a bitter struggle against the powerful minority of employing farmers—kulaks—who were forcibly dispossessed. They retaliated by slaughtering cattle en masse, and by inducing or intimidating others to follow their example.

Plant cultures suffered relatively little and recovered very rapidly from the effects of this period of turmoil, while increases in acreage and yield demonstrate effectively the advantages of collectivization. Livestock farming, however, suffered reverses from which it had not fully recovered when the last overall figures were made available in 1938. However, wartime reports indicate that, at least in Central Asia, the head of livestock had, by 1943, reached the pre-collectivization level. Thanks to the

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widespread use of artificial insemination and other scientific advances available through the agronomist stationed on each collective farm, the rate of increase in head of cattle since 1934 has exceeded all previous records, and there is every reason to believe that this rate will be maintained. Thus, the head of cattle in Kerghizia rose 25 per cent in 1941 and another 20 per cent in 1942.

Meanwhile the government pushed the project without which it felt that the achievement of real, and not merely legal, equality for Central Asia, would remain a fiction. It poured tremendous quantities of capital into these states with the objectives of creating an industry ultimately comparable, in per capita output, with that of Central Russia. Where the Tsar had bluntly refused to permit the erection of textile mills on the grounds that this would compete with Moscow industry, the Soviets pursued the policy of bringing the mills to the cotton fields. This development was only secondarily a matter of sound economic planning. Primarily, its purpose was to develop a class of native wage-workers who could be depended upon to understand the socialist goal of Soviet development, and from among whom native executives and administrators could be chosen. The importance of this policy can be seen in the treason trial of 1938. Faizulla Khodjaiev, head of the Government of the Bokharan Republic and later head of the Uzbek Government from its establishment until a couple of years before the trial, and Ikramov, head of the Communist Party of Uzbekistan, were both revealed to have remained bourgeois nationalists at heart and to have used their high posts to attempt to bring their own clique to power. Testified Khodjaiev:

> . . . We systematically ousted from the Soviet and party apparatus, sincere members of the Party, genuine Soviet people, and appointed our own people in their place. . . . For this purpose we recruited our cadres chiefly from among the bourgeois youth, and did not train them in Soviet schools but principally sent them abroad, to Germany and Turkey. . . . We formed our armed forces chiefly in the shape of militia . . . we endeavored to make use of the Basmachi movement . . .[11]

Utilizing his position, Khodjaiev not only trained his own people and attempted to form the nucleus of an armed group, as indicated above, but roused discontent against the Soviet

[11] *Report of Court Proceedings in the Case of the Anti-Soviet "Bloc of Rights and Trotskyites."* Published by the People's Commissariat of Justice of the USSR, Moscow, 1938, pp. 214-215.

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state by such measures as cutting down mulberry trees on the pretext that they interfered with large-scale farming, compelling the peasants to plant as much as 90 per cent of their land to cotton, so that fodder crops could not be raised and cattle would die off, and the like.

Unable, by their own admission, to come out as open opponents of the Soviet system because the people had been won to the support of that system, the bougeois nationalists could not prevent, but only retard, the development of Central Asia.

Seventeen years of Soviet rule in Uzbekistan saw the creation, from the ground up, of large-scale industry, the value output of which in 1937 was 5.6 times as large as in 1913. The number of tractors employed on its 6,500,000 acres of sown land was 21,500, more than in all of Germany, and the acreage under crop had increased 22.5 per cent since 1913. One thousand four hundred harvester combines were in use. Despite the growth of other cultures, the area planted to cotton trebled since 1913, and the crop doubled in the four years from 1934 to 1938.

Cultural development was indicated by the fact that the 1,100,000 students in its schools in 1938-39, out of a population of 6,282,000, was 64 times as large as before the revolution. Twenty-nine institutions of higher learning were in existence where there had been none before, 105 technical high schools, 23 scientific research institutes and 44 repertory theaters.[12]

Similar statistics of growth can be cited for the other Central Asian Republics.

But perhaps the new attitude and position of the Central Asian peoples in the USSR is most dramatically illustrated by the fact that Moscow stands today thanks to the heroism of the Panfilov Division. This unit, composed of sons of the Asiatics who rose in arms against the Tsar's attempt to conscript them in 1916, was thrown into the battle of Moscow in October 1941. Twenty-eight of its men, holding a road with grenade and gasoline bottle against twice their number in tanks, prevented a German breakthrough to the capital. They died to the last man, but Moscow, symbol of their new status, was not entered by that road. Or any other.

[12] *Politicheskii Slovar* p. 588. Gospolitizdat, 1940.

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III

SOVIET UZBEKISTAN FIGHTS HITLER[1]

East Meets West

Sweden is universally recognized as one of the most advanced nations on earth in its economy and culture. The appearance on the Asiatic continent of a state comparable to Sweden in economy, culture and national statehood would be news of the greatest significance to the world at large and to Asia in particular. The Uzbek Soviet Socialist Republic seems to fill the bill.

The population of Uzbekistan on the eve of the war was almost exactly the same as that of Sweden—6,300,000—in an area slightly smaller. How do they compare in the field of popular education? In 1938, Sweden, which has had a law requiring universal elementary education for exactly one century, had 569,000 children in its elementary schools; Uzbekistan, which then had had compulsory education only for about five years, had 916,000—this in a country which had had a one per cent literacy rate in 1914, when Sweden's rate was 99.7 per cent! Sweden had 60,000 students in secondary schools of all types in 1940; Uzbekistan, in 1938, had 179,000. Before the war, the number of students in Sweden's higher educational institutions was approximately 10,000. Uzbekistan, which could not boast of a single university graduate among its native population at the time of the Revolution, had 17,500 in its own higher educational institutions on January 1, 1939, not counting the considerable number studying in Moscow, Leningrad and elsewhere.

How does Uzbek economy compare with that of the West? In the modernization of agriculture, Uzbekistan is ahead of any European country. In 1938, Germany with twelve-fold the population had fewer tractors and harvester combines in use than Soviet Uzbekistan. In cotton, the main crop, Uzbek yields are, by far, the highest in the world.

[1] Based on articles by the author in the May and June, 1943 issues of *Soviet Russia Today*.

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Industrialization is regarded in the Soviet Union as a prerequisite to national progress, cultural development and actual equality among nations. Under the Tsars, Uzbekistan had been a source of cotton and silk for the textile mills of the Moscow region. Establishment of mills in Uzbekistan had been specifically prohibited as harmful to Russian economic and political interests. The Soviets set out to give Uzbekistan an integrated cotton industry. In the branches of the industry which had been permitted under the Tsars, that is cotton ginning and spinning, the advance over 1913 came to nearly 300 per cent in 1940. In the direct production of textiles the increase was 29,300 per cent!

In other fields the industrial advance is striking. The recovery of Uzbek petroleum to run the mechanized agriculture of Uzbekistan, was at nearly thirty times the 1913 figure. The metal-working industry centering around the manufacture of canal digging apparatus and mechanical cultivators and cotton pickers had risen 54 fold over the comparable production of 1913. Copper, sulphur, vegetable-oil and food industries have also been developed.

Shortly before the Nazi invasion, the first generators of the Chirchik hydroelectric development, planned primarily to power a huge chemical plant producing nitrate fertilizers for the cotton fields, went into operation. Wartime reports indicate the probability that the two stations of this enterprise, almost exactly comparable in capacity to the two largest plants in Sweden's famous hydroelectric system, are in full operation.

But it has been during the war that Uzbek industry has made its greatest strides, eclipsing the progress previously recorded. In 1913, industrial production came to only 42 per cent of the Russian economy. By 1937, 77 per cent of the economy of the USSR was industrial. Today Uzbekistan, which had barely emerged from the Middle Ages a decade ago, is at approximately the same level. For by August, 1942, 75 per cent of the value created by Uzbek economy was coming from industry.[2]

During the prosperity period of the twenties, American economy was 83 per cent industrial, and German—80. Thus, the Uzbeks are the first Asiatic nation, with the possible exception of the Japanese, to close the gap in economic development

[2] *Pravda,* August, 1942.

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between East and West. And their agriculture is fully modern, while Japan's is incredibly primitive. Moreover, they are the most powerful, economically, of the states of Islamic background either in Asia or Africa, a fact which has become known during the war to the people of so important a Moslem state as Iran. In 1939, before its remarkable wartime expansion, Uzbek industrial production exceeded that of Turkey, Iran and Afghanistan put together, although these three states have a combined population seven times that of Uzbekistan.

What is life like in this first state on the Asiatic mainland to merit description as "Western" in its economic development? In an article in *Pravda Vostoka* (Eastern Truth), the President of Uzbekistan said of his country's membership in the Soviet Union:

> The Uzbek people found its homeland in this union, united itself into a nation, built its own state.

Today Uzbekistan is at war with Hitler and his allies. Its people's wholehearted participation in the war is explained by their late President Akhunbabayev as follows:

> In all this, the great Russian people extended the hand of friendship and brotherhood to the Uzbek people and helped it stand erect. . . . The German fascist expansionists want to take from us our beautiful homeland, destroy our great union, destroy the national states of which it is composed. In the war against Hitlerite Germany the Uzbek people is defending its own homeland, its own state, its own happiness, its right to live.

As one of the sixteen Constituent Republics, the Uzbek Government conducts its business in its own language, handles education, public health, justice, agriculture and industries, other than those of national importance which are directed from Moscow. In such enterprises it has supervision over working and living conditions.

The War Effort: Industry

From Akhunbabayev's article and others in *Pravda Vostoka* recently received in this country from Tashkent, it is possible to obtain at least a partial picture of recent developments in Uzbekistan.

It was reported, for example, that an Uzbek named Nurut-

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dinov, new to industry and working in an armaments plant, told his department manager that he would like to make a special present for Hitler on the anniversary of the invasion.[3] By new methods he had devised, he turned out twelve times the required production per shift, on the night of June 22. When he came to work the next evening, he found a banner hanging in front of the plant, lettered "The Front thanks Comrade Nurutdinov for his work." Inspired by his example, and encouraged by the recognition given to his patriotic deed, the number of Stakhanovite workers in the plant multiplied rapidly after this incident.

Another report in *Pravda Vostoka* describes the reaction of the Uzbeks to the erection of the mills of Central Asia's first iron and steel industry. Collective farmers assembled, as they had done for the building of the famous Ferghana irrigation canal to dig the foundations of this huge project. And thousands were enrolling for the construction work. The plant is being built from the designs of the staff of the Central Asian Industrial Institute. The enthusiasm of the Uzbek people is understandable. The establishment of their own ferrous metal industry will enable Central Asia to equip, maintain and expand its own production of industrial and agricultural machinery. Knowledge of these facts was brought to every village by all available means of public education, and helped considerably in the recruitment of labor.

In another issue, we read that the town, Termez, close to the Afghan frontier, was celebrating the opening of the first large mechanized flour mill built in that district and that in the Ferghana district, a large refinery was being built to extract sugar from the beets being grown in Central Asia to replace the Ukrainian sugar producing areas now under German occupation. The same issue reported progress in the sinking of the second and third large-capacity coal mines just outside Tashkent, which will produce fuel for the steel mills now under construction.

Another item reports that the Syr-Darya River had been opened to navigation for the first time, a fleet of tugs and barges having been dispatched from the Amu-Darya, via the Aral Sea, for this purpose. Sixty per cent of the freight formerly carried by the overloaded Tashkent Railroad, connecting Central Asia

[3] *Pravda Vostoka,* July 4, 1942.

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with the southern Urals, can now be shifted to the river—including timber from the Tien-Shan mountains, coal from the mines at Shurab and Suliuktin, salt from new diggings near the river and petroleum from nearby wells, via a short pipeline to be built to the river bank.

The fleet is being added to with vessels built of Tien-Shan pine in new local yards and the whole fleet is being fueled with local coal and oil.

Before the war, twenty per cent of the output of all Soviet industry came from co-operative enterprises and from small factories. Though only twenty per cent of the Soviet total, this output, nevertheless, was twice as large as that of all industry in Tsarist Russia in 1913.

In 1942, this type of industry in Uzbekistan was producing at a rate 35 to 40 per cent over that of 1941. And though they were mainly filling subcontracts for war materials, it was announced that production of consumers' goods by these enterprises was at a higher level than before. It was in this manner that the needs of its million refugees were being met and work was found for those of little strength or skill.

Agriculture at War

At the beginning of 1942 Tashkent was informed that evacuation of industry and the loss of grain regions in the west would make it impossible for Moscow to meet the needs of Uzbekistan for imported food grains in 1942. At the same time the country's increased need for cotton for uniforms, explosives and medical supplies would not permit a cut in the cotton acreage. The loss of the Ukraine required also that Uzbekistan plant some 160,000 acres to the sugar-beet. Together with 1,500,000 acres to grain, this meant a total additional acreage of more than twenty-five per cent in a single year.

By any customary reckoning, the job appeared overwhelming, and in the specific conditions of wartime it might have seemed impossible. Only one-sixth of the additional arable land needed was immediately available. To get the rest would require digging trunk and distributor canals, sufficient to irrigate 1,250,000 acres of desert land, all in the short time before the planting season. Yet the job was done, and by a method devised by the Uzbek people themselves.

In 1939, Uzbekistan had planted all the acreage available

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under the existing irrigation network. But there was the rising demand for cotton, and the increased capacity of the individual collective farms which had acquired sufficient skill and machinery to farm a considerably enlarged acreage. The Naryn River had a flow of water sufficient to irrigate many tens of thousands of acres. Canalized, it could make fertile the entire Ferghana Valley. The collective farmers, on their own initiative, spent the months after the harvest digging the canal. The 160-mile-long canal, one of the largest irrigation projects on earth, was dug by 160,000 farmers in less than two months with Moscow providing 3,000 engineers and technicians and mechanical equipment. In 1942, on a still larger scale—a third more excavation was required—and despite the manpower shortage due to war, irrigation canals were provided for the needed acreage, and over!

Planting is now being done on mountain slopes, along the strips bordering the canal paths, and in the glades between orchards. Forest belts of drought-resistant trees, planted in the face of the desert, are now proving their value. Oases plantations are screened by them against the desert winds that formerly buried them under sand.

As the wartime crop of 1942 ripened, additional harvest hands were needed to bring it in and office-workers, housewives, students and school-children were enrolled. Far from resenting this action, the persons mobilized competed among themselves for higher output, and numerous harvest crews donated their earnings as farm-hands to the Defense Fund.

The story unfolds in news items in *Pravda Vostoka.*

July 8. A Ukrainian combine operator now working in Uzbekistan harvests 135 acres a day, 95 above quota.

July 14. Moscow orders the establishment of a Red Army Grain Fund to be secured by compulsory sale by the collective farms over and above the normal compulsory sale quotas. Immediately after the radio announcement, Uzbek collectives, without knowing the quantities to be required, offer the government advances of from 3600 to 7200 pounds out of their stocks.

July 19. The Uzbek government announces to its cattle raisers: "The government of our brother republic of Kirghizia offers to Uzbekistan the use of excellent Alpine meadows."

July 30. A meeting of the Republic's 1500 leading silk growers issues a public appeal to all Uzbek farmers. After pledging in-

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creased yields in their specialty, they call upon the cotton farmers to grow "An Extra Boll on Every Stalk!" Loafers must be made to feel as though they were deserters from the army. Farm, village and county officials must lead by personal example, by getting out into the fields. The traditional pre-harvest cotton festival must be foregone this year. Farmers must sow in the fall of 1942 at least eighty per cent of the grain scheduled to be reaped in 1943. Prosperous collectives should sell to the state all grain above their indispensable reserves.

Livestock farmers are urged to punish those guilty of slaughtering working cattle. They should improve their care of the herds, prepare more silage, mow clover at least three times and establish an untouchable fodder reserve for the early Spring. And after all the regular and wartime deliveries had been made Uzbek collective farmers brought an additional 5000 tons of food products for sale to the national reserves.

The results indicate that the appeal of the silk farmers was heeded. During the first six months of the year Uzbekistan was able to provide the Union with 31 per cent more meat than it had been called upon to deliver. 1942 grain production was threefold the 1941 figure.

Uzbekistan and the USSR

Enormous quantities of capital were poured into Uzbekistan as into other smaller Republics for their economic advancement in accordance with Stalin's belief that "actual" equality hinges on a modern economy. From the centers in the European Soviet districts came also doctors, teachers, scientists and creative artists. But as soon as possible Russians were replaced by native government and Party officials even when that meant using persons of upper-class background for a period. This was the case in Uzbekistan where, as recently as 1934, one-third of the members of the Communist Party—who usually are the most socially-conscious and, generally, best educated members of the community—were illiterate.

This is now past history. The common people of Uzbekistan have brought forward leaders evidently capable not only of directing their country in peacetime, but of solving the myriad problems involved in its wartime development. The Council of People's Commissars of the Republic is overwhelmingly Uzbek in nationality, from the Premier, A. Abdurakhmanov, down.

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Perhaps the development of the country is best reflected in the career of Yuldash Akhunbabayev, Chairman of the Presidium of the Uzbek Supreme Soviet, who died early in 1943.

Born near Ferghana in 1885, he began his working life as a farm laborer—the poorest of the poor. In 1916 he was jailed following a revolt of the Central Asian peoples. In 1921 he was the leader of a county organization of the Union of Poor and Middle Peasantry and he took part in the armed struggle against the Basmachi, counter-revolutionary terrorist bands. In 1925 he was elected Supreme Soviet Chairman, and shortly afterward was elected a member of the Presidium of the then highest organ of government, the Central Executive Committee of the USSR.

Uzbek identity with the USSR as a whole is being dramatically shown in the war. An article in *Pravda Vostoka* by Mayor Hussainov of the city of Tashkent describes the manner in which the people of that city are aiding evacuees, war invalids and the families of men in the forces. In each block, for example, groups of citizens, after work hours, painted and repaired buildings, striving to complete all their work by November 5 so that the war refugees could better enjoy the national November 7 holiday.

The workers of the entire consumers' goods industry of Tashkent contributed overtime to produce for the people of the areas recaptured by the Red Army some 10,000 spoons, 1,000 pails and buckets, 1,000 pieces of sewn goods, 1,000 pieces of knit goods, 500 pairs of shoes and felt boots, a ton of soap and 5,000 rubles worth of haberdashery. And the materials for this came by reducing wastage in their regular work.

Most moving of the reports of direct voluntary aid from the people of Uzbekistan to those of the areas under fire is this from Namangan district. There the Molotov collective farm had "adopted" a collective farm in the regions liberated by the Red Army west of Moscow. The Uzbek farmers donated 100,000 rubles in cash, 110 sheep and goats, ten calves, 440 lbs. of honey, 440 lbs. of wool, 1100 lbs. of lint, and ten metal beds. Twenty-five acres of wheat were planted, the first harvest from which went to the "adopted" farm, while the second (climatic conditions allow two harvests) will go to war sufferers. The meeting adopted this resolution:

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We have learned what the fascist plunderers do to the people, the land and its culture. The stories of refugees from the west, the eye-witness accounts of comrades who have broken out of encirclement, and the documents published in the press all go to prove that fascism brings ruin to the peasantry. Our hearts are filled with a holy hatred and hunger for revenge against the mortal foe. The sorrow that has overwhelmed our brothers suffering under the fascist scum is our sorrow. Our desire to help our Russian comrades comes from the depths of our souls. We will cut our own requirements to the minimum, but we will not permit our brothers to suffer need.

The Women of Uzbekistan

Without the freeing of its women from their former position as the chattel slaves of their husbands, all this would have been impossible. The statement of the silk growers, quoted above, was drafted and approved by a meeting consisting in its majority of women. Silk-growing, although revolutionized by modern methods, remains a woman's job. No legislation or propaganda could have won the majority of Uzbek women away from the veil until the government, by its textile plants and its practice of buying silk directly from the women growers, rather than from their husbands, brought economic independence to Uzbek womanhood.

In the fifteen years since she emerged from behind her shroud-like *parandja* (veil), the Uzbek woman has made strides that are almost incredible. A woman, Pasha Makhmudova, is vice-president of Uzbekistan. She is one of the hundred-odd Uzbek women who are members either of the Uzbek or, in her case, the All-Union Supreme Soviet. An Uzbek woman, Yuldashbaeva by name, holds the important post of Educational Secretary of the Uzbek Communist Party. There are many women industrial executives, technicians and engineers, and at least one Uzbek woman architect. Liudmilla Pavlichenko, the famous sniper, has her Uzbek counterpart in Ziba Ganieva, a tiny actress who, by July 1942, had twenty notches in her gun.

When the Uzbek Cabinet ordered that all war invalids be provided jobs and housing on one day's notice, the execution of this decree came within the purview of the People's Commissar of Social Maintenance, M. Islamova, a woman.

The following items are typical:

Three Uzbek girl weavers at the Tashkent Textile Mills . . . are now tending 192 looms each instead of the usual (!) 96. . . . It is estimated that since the outbreak of war these

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girls have turned out about 1,100,000 yards of fabric in excess of plan. Each day, when her shift ends, one of them stays at her looms producing additional cloth as a present to the nation. Or this: "A group of Samarkand housewives who meet to have one of their number read the newspapers to them, having learned of the need of the men on the Karelian front for warm clothing, have collected and sent a considerable number of items." And this: "Pabiga Kalieva, who works in a local (Tashkent) kindergarten, has adopted Kolya, a Ukrainian boy."

Not the least important reason for the participation of Uzbek women in the war effort is the fact that, by 1938, this Republic, with a population not quite equal to that of New York City, had 5500 pre-school institutions with 189,000 children in attendance.

Culture in Wartime

The strain of growing bigger crops with fewer working hands, of taking military training after long working hours, of being on call for compulsory farm work during planting and harvesting emergencies might seem to leave little incentive for cultural pursuits. But for Uzbekistan, as for every other part of the Soviet Union, culture is as integrated into the wartime life of the people as in peace. A single issue of *Pravda Vostoka* carried the following theater ads for the city of Tashkent (exclusive of movies): Simonov's "The Russian People" at the Red Army House; the Russian classic, A. N. Ostrovsky's "The Guiltless Guilty" at the Music Hall; the pioneer Uzbek opera, "Leili and Medzhnun," at the Uzbek Theater of Opera and Ballet; Sholom Aleikhem's "Wandering Stars," performed by the world-famous Moscow State Jewish Theater in the auditorium of the Tashkent Conservatory of Music (more than a million Jews from the Baltic states, Byelorussia and the Ukraine were safely evacuated to Uzbekistan); the Tchaikovsky-Pushkin opera "Eugene Onegin" at the Russian Theater of Opera and Ballet. The Russian Drama Theater and Operetta Theater were also performing.

Tashkent would seem to be the wartime cultural capital of the Soviet Union. In addition to the thirty-odd higher educational institutions founded there since the revolution (there had been none before) world-famous centers of the arts, such as the Leningrad Conservatory of Music, have been moved

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there. *Pravda Vostoka* reported that an opera written by Russians, Kozlovsky and Geres, on the life of a famous Central Asian scientist and humanist, Uleg-Bek, was being staged at the Uzbek Theater of Opera and Ballet with the Jewish director, Kaplan, directing famous Uzbek stars.

The Soviet movie industry, now centered at Alma-Ata and Tashkent, was filming the adventures of a hero of Uzbek folklore, during the summer of 1942. Renowned Russian historians were giving free lectures in the public parks on Uzbek history. Professor Steinberg of the Leningrad Conservatory was offering his valued, and in this case, positive criticism of the most ambitious musical composition yet to be penned by an Uzbek, Mukhtar Ashrafi's First Symphony, which was awarded one of the Stalin prizes in Music for 1943. The first anthology of contemporary Uzbek poetry in Russian translation had been published.

Thus, today, the Uzbeks are fighting Hitler with gun and pen, turret-lathe and harvester combine. Perhaps the most effective weapon of all is the news reaching the peoples of the East. Here is a nation that a generation ago was as retarded in its development as any in Asia. Yet, given political and social equality, given national statehood, above all, given the unstinted material aid of a non-Asiatic people in trained manpower and the means of modern economy and culture, it has closed the gap between the Middle Ages and the 20th century in 20 years.

The Soviet Union is not at war with Japan. But by the pursuit of its policy of aiding its Eastern people achieve equality in life and not merely before the law, it has made a great concrete contribution to the defeat of Japan's "darker races" propaganda and the Fifth Column built thereon. The lesson of Soviet Central Asia is not lost upon the east. *Indian Information*, an official British publication issued in India, has used pictures of life in Soviet Central Asia for the obvious purpose of convincing its Indian readers that the cause of the United Nations is just. The *Soviet Union News*, much of whose space is given to descriptions of life in the Eastern Republics, is also published there. And there is little doubt that when the war is over, Central Asian machinery, culture and engineers will share with those of the West in helping modernize the Near and Middle East.

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APPENDIX I

TABLE VII

MOST IMPORTANT CONSTRUCTION PROJECTS IN THE SOVIET FAR EAST UNDER THE SECOND FIVE-YEAR PLAN, 1933–37[1]

I. KHABAROVSK AND MARITIME TERRITORIES[a]

1. *Projects over Ten Million Rubles in Value*

Project	*Location*	*Construction to Begin*	*Construction to End*	*Projected Capacity*	*Cost in Thousand Rubles*
Baikal-Amur Railroad		1932	[b]	1080 miles	1,100,000
Iron and Steel Works	[c]	1936	[b]		245,000
Komsomolsk Shipyards	[c]	1932	1936		230,000
Moscow-Khabarovsk Road				5,100 miles	150,500
Khabarovsk-Komsomolsk Road				228 miles	90,000
Oil Refinery (2 tubular, 3 cracking installations)	Khabarovsk	1932	1934[b]	1,000,000 tons first distillation 450,000 tons cracking	63,900
Cement Works, 1st and 2nd sections	Spassk	1931	1934 1937	2,200,000 barrels	56,300
Sikhote-Alin Polymettalic Works	Tetiukhe	[d]	1936		30,000
Khabarovsk-Vladivostok Road				450 miles	30,000[b]
Artem Power Plant	near Vladivostok	1931	1936	24,000 kilowatts	28,000
Power Plant	Khabarovsk	1934	1937	24,000 kilowatts	25,000
State-operated rice farms	[e]	1931	1937	51,750 acres	22,200
Sugar Refinery	Voroshilov	1932	1935	1,200 tons of beets per day	21,200

[a] Trans-Siberian double-tracking and side lines excluded.
[b] To be completed later than 1937.
[c] Undoubtedly at Komsomolsk.
[d] Already in operation, being expanded.
[e] Probably at Khabarovsk.
[f] Expense budgeted for the 1933–1937 period of construction.

[1] *Vtoroi Piatiletnii Plan: Razvitiia Narodnogo Khoziaistva SSSR,* Gosplan, Moscow, 1939. The listing above represents only a portion of the four billion ruble capital investments made in this area in the years 1933-1937. Although no list similar to this one was issued to cover the years 1938-1942, the size and number of projects planned will be understood if it is remembered that, during the later period, capital investments in the Maritime and Khabarovsk Territories were to be ten per cent of the national total, while the investments in 1933-1937 were only four per cent of a national total half as large.

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TABLE VII (*Continued*)

Project	*Location*	*Construction to Begin*	*Construction to End*	*Projected Capacity*	*Cost in Thousand Rubles*
"Diomide" Fishing Port	Vladivostok	1934	(b)		20,000
Glass Works		1937	(b)	14,000 tons flat glass 6,000 tons special glass	20,000
Cold Storage Plant	Vladivostok	1931	1935	150 tons daily freezing capacity	15,400
Soya oil Plant	Voroshilov	1930	1935	6,200 tons of oil	13,220
8-frame sawmill & factory	Drofa	1937	(b)	320,000 cubic meters	13,100
5-frame sawmill & factory	Ussuri	1930	1936	160,000 cubic meters	12,930
6-frame sawmill & factory	Permskoe	1936	(b)	215,000 cubic meters	11,800
Quality flour mill & cereal plant	Bochkarevo	1933	1934	200/25 tons per day	10,870
Auto assembly plant	(a)	1935	(b)		10,000
Shoe Factory		1936	(b)	3,000,000 pair per yr.	10,000
2. *Projects from One to Ten Million Rubles in Value, by Category*					
Electric Power Stations	Khabarovsk	1932	1935	6,000 kilowatts	
	Birobidjan	1932	1936	1,000 kilowatts	
	Vladivostok	1933	1936	9,000 kilowatts	
	Blagoveshchensk	1934	1936	2,100 kilowatts	
	Svobodnyi	1935	1937	1,000 kilowatts	
Lumber industry					
5-frame sawmill	Iman	1930	1933	160,000 cubic meters	5,280
2-frame sawmill	Sakhalin	1935	1936	50,000 cubic meters	1,800
4-frame sawmill & fact.	Upper Zeia	1936	(b)	160,000 cubic meters	7,200
4-frame sawmill	Sovetskaia Gavan	1935	1936	140,000 cubic meters	6,700
Tempr. sawmills totaling 12 frames		1932	1936	180,000 cubic meters	2,900
Plywood factory, 3-sectional		1935	1937	33,000 cubic meters	9,000
Furniture factory	Khabarovsk	1937	(b)	7,000,000 rubles per year	4,500
Food Industry					
Meat packing house	Khabarovsk	1934	1936	7,200 tons	9,500
Fishing Port	Petropavlovsk on Kamchatka	1935	1937		8,000

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TABLE VII (*Continued*)

Project	*Location*	*Construction to Begin*	*Construction to End*	*Projected Capacity*	*Cost in Thousand Rubles*
Ship-repair shops (Incl. in the above)	Petropavlovsk on Kamchatka	1936	1937		1,000
Refrigerator (Incl. in the above)	Petropavlovsk on Kamchatka	1935	1937	50 tons daily freeze	4,000
Fish cannery	Lake Balon	1933	1935	10,000,000 cans	1,800
" "	Nakhodka	1937	(b)	" "	1,600
" "	Vladimir	1937	(b)	" "	1,600
Cold Storage Plant	Ozerpakh	1932	1935	80 tons daily freeze	1,600
Refrigerator		1936	1937	30 tons daily freeze	1,500
Barrel & Crate Plant	Shkotovo	1932		933,000 barrels 1,000,000 crates	8,200
Shipyard	Nakhodka	1934	1937	10,000,000 rubles	8,000
Fishing village	Vladivostok	1931	1936		7,500
Whaling vessels (3)		1936	1937 (b)	800 horse power	4,500
Whaling mother ship		1937		2,500 horse power	9,000
Soap factory	Khabarovsk	1934	1934	7,000 tons of soap	1,000
Agar-agar works		1936	1937	500 tons	2,000
Salt Works	Lake Talma	1932	1935	10,000 tons	4,560
" "	Lake Topadze	1935	1936	10,000 tons	4,360
" "	Uglovaia Bay	1936	(b)	20,000 tons	8,700
Quality flour mill & cereal plant	Khabarovsk	1933	1934	200 & 25 tons per day	9,520
Sweet-goods factory		1937	(b)	12,000 tons	1,500
Feed plant		1937	(b)	33 tons per shift	2,000
Macaroni factory	Khabarovsk	1936	1937	11,300 tons	2,500
Cold Storage Plant	Voroshilov	1936	1937	1,000 tons	1,700
" " "	Svobodnyi	1936	1937	1,000 tons	1,700
Communications					
Radio-telegraph-telephone Station	Vladivostok	1933	1936	16 kilowatts, 2 transmitters	1,400
Radio-telegraph-telephone Station	Khabarovsk	1933	1937	335 kilowatts, 12 transmitters	4,240
Broadcasting station	Khabarovsk	1931	1935	10 kilowatts	670
" "	Vladivostok	1931	1934	10 "	1,080
" "	Blagoveshch-ensk	1935	1935	10 "	600
Miscellany					
Agricultural drainage system		1934	1937	1,500,000 acres	
Warehouses of the export branch of the fish canning industry, mech-anization of		1936	1937		1,800
Port of Vladivostok		1933	1937		8,500
Khabarovsk River Port		1933	1937		2,000
Ports on Kamchatka Peninsula			1937		2,000
Ports on the island of Sakhalin		1933	1937		5,500

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TABLE VII (*Continued*)

II. BURIAT-MONGOL AUTONOMOUS SOCIALIST SOVIET REPUBLIC, IRKUTSK AND CHITA OBLASTS

1. *Projects over Ten Million Rubles in Value*

Project	*Location*	*Construction to Begin*	*Construction to End*	*Projected Capacity*	*Cost in Thousand Rubles*
Lena Railroad		1937	[a]	486 miles	470,000
Locomotive and Car Repair Works[b]	Ulan-Ude	1932	1936	1,080 locomotives; 2,000 passenger cars; 12,000 freight cars	170,000
Railway Car Building Works	Irkutsk	1936	[a]	10,000 double-truck cars	110,000
Ulan-Ude-Kiakhta Railroad		1936	1937	123 miles	76,500
Iron and Steel Works	Petrovsk-Zabaikalsk	1929	1937		
Trans-Baikal Non-ferrous Metals Works					47,800
Irkutsk-Cheremkhovo Power Plant		1934	1937	24,000 kilowatts	40,000
Spinning and weaving mill	[c]	1936	1937	11,000 spindles; 7,000,000 meters of cloth	38,000
Flat Glass Works	Ulan-Ude	1930	1934	14,000 tons	20,800
Cement Factory	[c]	1936	1937	1,000,000 bbls.	20,000
Meat-Packing Plant	Ulan-Ude	1932	1935	16,700 tons	19,700
Vacuum Salt Works	Usole	1936	[a]	150,000 tons	14,000
Salt Works (mine and coal diggings)	Usole	1931	1935	100,000 tons	11,840
Kolanguev fluor spar mine and agglomeration plant	Khadabulak	1934	1937	50,000 tons	11,200

2. *Projects from One to Ten Million Rubles in Value, by Category*

Power Plants	Irkutsk	1930	1935	9,000 kilowatts	
" "	Chita	1934	1937	8,000 kilowatts	
Filament Works	Irkutsk	1934	1936		2,000
Wagon Works	Cheremkhovo	1934	1936	17,000,000 rubles per year	8,000
Lumber					
Wooden Pipe Department	Biriusa	1931	1934	360 miles of pipe	1,530
Standard Housing Department	Zima	1931	1933	150,000 sq. meters of floorspace	1,250
6-frame sawmill & factory	Ulan-Ude	1936	1937	180,000 cu. meters	9,100
4-frame sawmill & factory	Irkutsk	1936	1937	120,000 cu. meters	6,050

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TABLE VII (*Continued*)

Project	*Location*	*Construction to Begin*	*Construction to End*	*Projected Capacity*	*Cost in Thousand Rubles*
10-frame temporary sawmills [c]		1933	1937	175,000 " "	3,750
Two-aggregate plywood plant	[c]	1936	1937	19,000 " "	4,800
Furniture factory	Irkutsk	1936	1937	6,000,000 rubles per yr.	4,500
Cellulose plastics [c]		1937	[a]	5,000 tons	6,000
Rosin Soap plant	Transbaikalia	1937	[a]	2,000,000 sq. meters insulating material & 3,200 tons rosin soap	4,000
Light Industry					
Felt Boot factory [c]		1936	1937	2,000,000 pair	6,000
Sheepskin coat factory	Chita	1932	1935	860,000 per year	8,500
Food Industry					
Meat Packing Plant	Irkutsk	1934	1936	8,800 tons	9,500
Fish cannery	Northern Lake Baikal	1936	1937	5,000,000 cans	2,000
Soap factory	Irkutsk	1932	1934	20,000 tons of soap	2,600
Soap factory	Chita	1936	1936	3,500 tons of soap	1,000
Cold Storage Plant	Chita	1934	1935	1,000 tons	1,800
Transport					
Cheremkhovo-Angara Railroad		1932	1935	14 miles	5,000
Angara-Lena Road				166 miles	6,000
Tunka Road				195 miles	4,400
River control	Angara	1933	1937		800
	Selenga	1933	1937		6,000
Communications					
Radio-telephone-telegraph stations	Chita	1933	1935	17 kw., 2 transmitters	1,100
	Irkutsk	1933	1937	291 kw., 9 transmitters	5,650
Broadcasting stations	Ulan-Ude	1931	1933	10 kilowatts	450
	Chita	1936	1936	10 kilowatts	600

[a] To be completed later than 1937.
[b] Now manufactures as well as repairs.
[c] May be in Krasnoyarsk Territory, not Far East.

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TABLE VIII

AGRICULTURE IN THE SOVIET FAR EAST IN 1938[2]

I. *Acreage and Livestock*

Administrative Subdivision	*Sown Acreage*		*Livestock*			
	Total	*Sown to Grain*	*Horses*	*Cattle*	*Hogs*	*Sheep & Goats*
Maritime Territory	795,825	540,000	64,000	147,200	166,700	29,600
Khabarovsk Territory	1,452,000	1,115,000	59,700	166,100	111,000	37,700
Irkutsk Oblast	1,839,500	1,635,500	162,700	436,100	181,000	294,400
Chita Oblast	1,480,250	1,357,500	212,700	501,500	137,100	833,100
Buriat-Mongol ASSR	966,750	872,000	120,300	382,700	67,900	444,700
Yakut Auton. SSR	251,250	241,000	162,700	392,000	14,000	300
	6,785,575	5,761,000	782,100	2,025,600	677,700	1,639,800

II *Collectivization and Mechanization*

	Collectivization									
								% of work performed by tractor		
Administrative Subdivision	*No. of Coll. Farms*	*% collective by sown acreage*	*No. of Machine & Tractor Stations*[a]	*No. of State Farms*[a]	*Tractors*	*Combines*	*Trucks*	*Spr. sowing*	*Gr. Harvest*	*Ploughing*
Maritime Terr.	498	99.1	43	26	2906	959	1296	82	78	[b]
Khabarovsk "	693	99.7	67	30	4598	2114	2151	90	94	[b]
Irkutsk Oblast	407	99.8	61	17	3076	832	869	39	24	82
Chita Oblast	772	99.9	53	12	2465	671	1465	33	36	92
Buriat-Mongolia	572	99.8	25	3	1248	275	911	28	18	100
Yakutia	1255	88.2	11	5	427	85	111	[b]	5	[b]

[a] Machine-and-Tractor Stations are government-owned "garages" which provide agricultural machinery for the use of collective farms in return for a fixed rent payable in agricultural produce. State farms are state-owned and are operated by salaried employees, as distinct from collective farms, which are closely-knit associations of independent farmers who have pooled their land and most of their cattle.

[b] No data.

[2] *Sotsialisticheskoe Selskoe Khoziaistvo SSSR,* Gosplanizdat, Moscow and Leningrad, 1939.

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APPENDIX II

SPEECH AT CONFERENCE OF LEADING COLLECTIVE FARMERS OF TADJHIK AND TURKMEN SSR

by JOSEPH STALIN

December 4, 1935

Comrades, the presidium of this conference has instructed me to make two announcements:

Firstly, that the presidium intends to recommend for highest award, for an order of distinction, all those present at this conference, men and women, for their excellent work.

Secondly, that the government has decided to make a gift of an automobile truck to every collective farm represented here and to present every participant at this conference with a gramophone and records and watches—pocket-watches for the men and wrist-watches for the women.

I am being told on all hands that I must say something—

Voices: Quite right.

What is there to say? Everything has been said.

Evidently, you are going to make a success of cotton. That is apparent from everything that is going on here. Your collective farms are growing, you have the desire to work, we shall give you machines, fertilizers you will receive, every kind of assistance you may possibly need—Comrade Molotov, the Chairman of the Council of People's Commissars, has already told you that—will be given. Consequently, you will make a success of cotton, and a prosperous life is opening up.

But, comrades, there is one thing more precious than cotton—it is the friendship between the peoples of our country. The present conference, your speeches, your actions, go to show that the friendship between the peoples of our great country is growing stronger. That is a very important and noteworthy fact, comrades. In the old days, when the tsar, the capitalists, and the landlords were in power in our country, it was the policy of the government to make one people—the Russian people—the dominant people, and all the other peoples subjugated and oppressed peoples. That was a bestial, a wolfish policy. In October, 1917, when the great proletarian revolution began in our country, when we overthrew the tsar, the

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landlords and capitalists, the great Lenin, our teacher, our father and tutor, said that henceforth there must be neither dominated nor subjugated peoples, that the peoples must be equal and free. In this way he buried the old tsarist, bourgeois policy and proclaimed a new policy, a Bolshevik policy—a policy of friendship, a policy of brotherhood between the peoples of our country.

Since then eighteen years have elapsed. And now we already see the beneficial results of this policy. The present conference is a vivid proof of the fact that the former mistrust between the peoples of the USSR has long ago been laid to rest, that mistrust has been replaced by complete and mutual trust, that the friendship between the peoples of the USSR is growing and gaining in strength. That, comrades, is the most precious thing that the Bolshevik national policy has given us.

And friendship among the peoples of the USSR is a great and important achievement. For as long as this friendship exists, the peoples of our country will be free and invincible. Nothing can daunt us, neither enemies at home nor enemies abroad, as long as this friendship lives and flourishes. You need have no doubt of that, comrades.

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APPENDIX III

THE PEOPLE BUILD

By USMAN YUSUPOV, *Secretary of the Central Committee of the Communist Party of Uzbekistan*

Pravda, April 26, 1943

A people's movement for the electrification of the Republic has developed in Uzbekistan. The construction of new hydroelectric stations by the most rapid methods has become one of the most important tasks placed upon the Uzbek people by our war economy. . . .

During the last few years, and particularly in the course of the war, Uzbekistan has become one of the large industrial districts of our country. Industrial production now accounts for 75 per cent of the output of the economy of the republic, although agriculture has also shown considerable growth. Whole new branches of industry, of first-rate importance for supplying the front, have come into being, but the restricted power resources now available do not permit the utilization of existing industrial facilities to their full capacity. Despite the fact that the construction of new hydroelectric stations during the past three years—the Tavak, Komsomol, Ak-Tepin, Ak-Kavak plants, among others—has made possible an increase of power output to more than twice its previous level, this growth of power resources has lagged far behind the development of industry. As a result, electric power has become the worst bottleneck in the national economy of Uzbekistan.

It became necessary to take the most decisive steps in order to overcome the rising difficulties and to guarantee the maximum utilization of the productive capacities of the republic for the needs of the front and to aid in the most rapid rehabilitation of the economy of the areas freed from the German fascist invaders. The situation demanded the enlargement of the power resources of the republic in the briefest period of time through the construction of a number of plants within the space of one or two years.

In January, 1943, there was begun the construction of five hydroelectric plants, including the Farkhad Station, which will be one of the largest in the Soviet Union. Three of these plants are to go into operation during this very year, and two of them, during the latter

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half of 1944. The work involved is considerable. Twenty million cubic yards of earth are to be moved, and 350,000 cubic yards of concrete and reinforcing to be poured. Thirty million man-days of work will be required, including 22,000,000 on the Farkhad Station.

How has the party organization of Uzbekistan undertaken to solve these problems? We began with the proposition that in time of war, in view of the limited resources available, such tasks can be fulfilled only if the people accept them as their own, and if there be utilized, in the first place, the existing material and technical productive resources of the republic.

The fact that the Uzbek people have accumulated valuable experience in ultra-rapid construction in the field of irrigation is well known. And the war had already demanded of us bold, large-scale utilization of this remarkable popular experience in big and complex industrial construction jobs.

First of all, a mass campaign of explanation and organization was waged in factory, office and farm. We involved in this campaign all active party, government, youth league and collective farm leaders, placing as our objective that not a single working-person in the republic should remain unclear as to the importance and meaning of the construction of the new hydroelectric plants and refrain from taking an active part therein.

The nation-wide movement for electrification began with an accounting and proper distribution of the manpower resources, and the mobilization of material means for construction. The collective farmers decided to spare a portion of their labor force, assigning for this purpose one person from each brigade (field-gang), on the condition that the remaining members would do as much work as if the brigade had remained at full strength. Thus, more than 30,000 permanent workers for the Farkhad Project were recruited from the farms of Ferghana, Andizhan, Namangan, Samarkand, Bokhara, Kashka-Darya, Surkhan-Darya and Khorezm Oblasts and from the Kara-Kalpak Autonomous Soviet Socialist Republic. Labor for the Boz-Sui Station is being provided by the farmers of Tashkent Oblast, while the people of the city of Tashkent themselves will build the Salar Power Plant. And every oblast, raion and village Soviet has its own portion and quantity of work definitely assigned to it from now until the job is completed. (This enables the people and officials of each district to see, in visible terms of work done, how their crews have been doing, and serves as a stimulus toward inter-district rivalry—W.M.)

There has now begun, with the most active and operative participation on the part of the masses of the people, the collection of

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the building materials needed for the new projects—timber, tools, furnishings for offices, shops and the housing of labor, building machinery, and power and machine-shop equipment. As a result, there was delivered to the Farkhad site, within a very brief period of time, more than 20,000 shovels and mattocks, 5,000 picks and crowbars, 40,000 sacks and barrows, 6,000 cubic yards of lumber, 25,000 pieces of cane furniture, and a large quantity of office and home furnishings—tables, chairs, beds, chests, wash-basins, tea-kettles, dishes, cisterns, lamps and the like.

On January 20th, 7,000 collective farmers from six oblasts of the republic arrived at the Farkhad site to build housing for the workers. They brought with them their own means of transportation—more than 400 carts and wagons with their horses, fodder, tools, lumber, cane products, fuel, food and furnishings. In twenty days' time they had built dug-outs able to house 40,000 workers. (!)

Surveying and planning personnel, most of whom had had experience in the ultra-rapid mass construction of irrigation projects, had begun their work at the beginning of January. They laid out work for 70,000 people.

This huge mass descended on the project on February 10th (N.B. —This was only a month after surveying had begun and twenty days after the first earth had been broken for dug-outs.—W.M.) They included collective farmers, workers, engineers, technicians, cafeteria personnel, doctors and writers. (!)

Large-scale earth-moving began. In two months time more than 3,000,000 cubic yards of earth had been removed, nine miles of railway bed and six miles of track laid, as well as six miles of paved highway, and telephone and switchboard communications set up to serve the entire project. The construction of power lines, a power station, machine shops and a gravel plant are now in process. Raw materials and equipment for these enterprises has also been collected within the republic.

The collective of builders has brought forward examples of self-sacrificing, heroic labor. The overwhelming majority of the farmer-construction workers regularly turn out two to three times the amount of work required of them in the course of a day. Labor productivity has reached levels never previously attained on any popular construction project. The five-man crew of comrade Igamberyev from Namangan raion regularly turns out the work of twenty-five to thirty men. (These amazing records are based, not on speed-up, for it is impossible for one man to do the work of five through physical exertion alone, but on efficient organization and time-study by the men themselves—Stakhanovism—W.M.) Israil Manavarov, a farmer from the Andreev Collective of Chinaz raion

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in Tashkent Oblast dug up to sixty cubic yards of earth a day, although the quota was only four. There is a brigade of seventy Uzbek girls from Kokand raion who stood up successfully in competition with the best Stakhanovite brigades of the project. Similar examples may be cited by the hundreds.

Much attention is being paid to the living conditions of the workers and cultural services for them. The three large repertory theaters of the republic are helping provide recreation for them, while each oblast sent brigades of entertainers along with its builders. Newspapers appear in the Russian and Uzbek languages, and a radio loud-speaker system has been set up. Writers, poets and artists are exceedingly active at the construction sites. (It is customary to post portraits of the best Stakhanovites in prominent places, to caricature workers or executives who are retarding the work, and to use every means of written and illustrative agitation to inspire and stimulate the workers—W.M.) There are agitation-centers at every site. Two hospitals with 250 beds and twenty other offices served by medical personnel have been established on the project.

The masses of the people have undertaken the execution of the program of electrification as they would the most important tasks of the war economy. The ultra-rapid mass methods are being applied here in a new manner in industrial construction. Where the collective farmers contributed only their labor to the irrigation projects, and, at that, only during the brief periods between the rush seasons in farming, now, in the building of the power stations, the masses of the people are contributing not only their labor, but their material means, and not for brief periods, but regularly, the year round.

The people's ultra-rapid methods of work on the Farkhad Project have thrown into the discard all previous conceptions about the inevitability of long periods of preparation, surveying and planning before the beginning of mass construction work. These methods have demonstrated for all to see that it is possible to survey, plan and build simultaneously, conducting these various types of work parallel to each other, as a single whole. The surveyors and engineers have cut to a minimum the so-called preparatory period, for within twenty days after the arrival of the first group of farmers housing had been built, basic earth-moving operations had begun, the construction and assembly of subsidiary enterprises was under way, sidings were being built, and within two months concrete was already being poured. Finally—and this is most important—the experience of the first stages of the construction of the Farkhad Project, where masses of collective farmers worked during the height of the spring season, has demonstrated that the participation of collective farmers in in-

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dustrial construction may be conducted without adverse effect upon the crops. For the republic is completing spring sowing of grain crops ten to fifteen days earlier than last year, and the planting of sugar beet has already ended.

Cotton planting is going more successfully than last year. The Ferghana and Andizhan Oblasts have already completed planting, while the Namangan and Surkhan-Darya Oblasts and the Kara-Kalpak ASSR will do so in the immediate future. The republic as a whole will have completed planting by the last days of April.

Shortly before the completion of the first stage of the large earth-moving work, on the eve of the spring sowing season, the farmer-builders of the Farkhad Hydroelectric Station issued an appeal to all the working people of the republic to follow their example, to do the work of two or three, and to assure the completion of the planting in the briefest period of time. This appeal met with the warmest response on the part of the broadest masses of the working men and women and collective farmers of the republic. Enthusiastic inter-raion (county—W.M.) meetings of persons active in the leadership of the collective farms and the village Soviets, were held in all oblasts and raions in order to discuss the appeal of the Farkhad workers. More than 20,000 persons took part in these meetings. These active farm and rural government personnel gave unanimous support to the proposal advanced by the Farkhad builders that every able-bodied collective farmer earn a minimum of 250 labor-days in the course of the year (the law requires only 150 labor-days per farmer, permitting him to spend the rest of his time in his private plot, if he so desires—W.M.), as well as to the proposals that all persons living on farms who had not previously engaged in the work of the collective (this would apply to wives of farmers, in particular—W.M.) be involved in this work, that the collective farmers themselves participate in the establishment of seed reserves on the farms, and that the fullest use be made of every minute of working time.

The appeal of the Farkhad construction workers met with a warm response on the part of the urban workers as well. During the past month there has been a noticeable increase in the level of production in industry. Many enterprises which had previously lagged behind production schedules, began to fill and overfulfill their quotas during March and the first half of April. The workers of Tashkent are successfully carrying through the work of building the Salar Power Plant.

The party organization of Uzbekistan and the Uzbek people understand fully the difficulty and complexity of the execution of the program of new industrial construction on so large a scale and in so brief a period of time. We have undertaken to carry out these plans

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in full consciousness of the fact that it will be necessary to meet and overcome the most serious difficulties.

The complexity and difficulty of carrying this program into life have called forth a new and powerful wave of labor enthusiasm among the masses and an unswerving determination to take direct and active part in surmounting these obstacles. The working people of Uzbekistan consider this to be a matter of honor and their patriotic duty to their country.

The Bolsheviks of Uzbekistan and the entire Uzbek people, under the leadership of their beloved leader, comrade Stalin, will complete with honor the program of new industrial construction now undertaken. They will do everything necessary to meet the demands of the fighting fronts and for the most rapid and complete destruction of the German-fascist invaders.

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APPENDIX IV

NINE MILES FROM INDIA

It is customary to begin a description of the Soviet Pamir by saying that this is the "Roof of the World," that we live at an altitude of from 7500 to 15,000 feet above sea level, and that during most of the year Mountain Badakhshan is cut off from the mainland and lives in its own exotic world. But today the inhabitants of Mountain Badakhshan are not cut off from the rest of the country for a single day. In Khorog, Rushan, Vanch and other counties of the Pamir, radio receivers, powered by electricity derived from mountain torrents, get broadcasts from every part of our country. These broadcasts are reprinted in the newspaper *Badakhashoni surkh*, and the news soon reaches the farthest mountain villages.

Before the war almost the entire economic life of Badakhshan centered around commodities and foodstuffs brought in during the summer, a process which cost the government huge sums of money. During the years of war, however, party and government agencies and the collective farm dekkans have been creating their own economy and are reducing to the very minimum the so-called "pre-usage" import of commodities. As a result, the Mountain Badakhshan Autonomous Region is producing a considerable proportion of the grain and vegetables it requires.

In 1942 the Region exceeded its quota for acreage sown to winter crops by 27 per cent. This spring the collective farms of Badakhshan are extending the area under spring crops by 2470 acres. For the dwellers of the high Pamir, accustomed for decades to plant mere hatfuls of land, this figure speaks volumes. For example, in order to increase their sown acreage by 500 acres, the collective farmers of Ishkashim county had to dig an irrigation canal seven miles long. To be more exact, they did not dig it, but hewed it out of the mountain cliffs. The course of the canal passes over a huge chasm. This obstacle was overcome by suspending a sluice across it.

Every clod of cultivated soil in the Pamir represents colossal efforts, a vast amount of physical labor, and the overcoming of incredible natural difficulties. For that very reason the people of the Pamir value their land most highly and strive to wrest from it all that it is capable of producing. Last Spring the men and women of the collective farms trucked to their mountain fields or, to be more exact, hauled on their shoulders and in their hands hundreds of tons of

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natural fertilizer. High school students who are members of the Young Communist League alone gathered a thousand tons of ashes.

The land has repayed its masters handsomely for these efforts. Last year Shugnan county recorded an average grain yield of 26 bushels per acre. Individual collectives did even better, Ordzhonikidze Farm getting 44 bushels per acre from its 190 acres and Kalinin Farm taking in 51 bushels on the average, from its 145. In the Vanch county, the collective farm whose chairman is Bibimo Yusupov, a member of the Supreme Soviet of Tadzhikistan, succeeded in doubling its grain crop over the preceding year.

Until 1934 the Pamir simply did not know what was meant by a potato. The tubers were first brought in and planted by the Red Army's frontier troops. But today this crop is favored above all others by Pamir farmers. The field gang led by farmer Mirzanobotov of the Stalin Collective has brought in record yields running between 30 and 33 tons per acre, while the researches of the Chichiktin Biological Research Station and the Pamir Botanical Gardens have demonstrated that the markedly continental climate of the high Pamirs and the presence of a high degree of ultra-violet radiation has an extremely favorable effect upon the accumulation of sugar-bearing flour-matter in plants and speeds up the formation of the tubers of the potato.

Our local scientists are helping the collectives to speed the introduction of new crops. The Pamir Botanical Gardens, directed by comrade Gurskii, has, in the period just past, provided the collective farms with 40,000 seedlings of fruit trees, berry bushes and grape vines. Not long ago, this institution undertook to foster strawberry-growing in Badakhshan and now has a rich collection of varieties of this fruit.

Strawberries in the Pamir! Who would have dreamed of this just fifteen or twenty years ago, when to grow a head of cabbage in these mountains was the acme of the dreams of the boldest agricultural experts of the Pamir. Not content with these achievements, the Botanical Gardens have worked out a new method of irrigating the porous earth of this area, and this method is now being applied by many collectives.

The battle for water is, in the conditions of the Pamir, synonymous with the battle for the harvest. For this reason recent years have witnessed a continuous struggle by the peasantry to retain water for purposes of irrigation. But to retain the water means to plant forest belts. Our mountains are not rich in timber, but our collective farmers have been actively correcting this "omission" of nature. More than 300,000 trees have been planted recently—willow, poplar, ash and maple. Over 180,000 mulberry trees have been planted on the

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banks of the irrigation canals. Their leaves will provide food for silkworms. In addition to all this, our collective farmers were able, last year, to carry out successfully the government's plan for increasing the head of all types of livestock—cattle, sheep, goats and beasts of burden.

Our farmers' love for their country and awareness of the needs of the fighting fronts is visible in a thousand and one deeds, large and small. Our shepherds and farmers find many ways to make time so as to be able to bring in the valuable deficit minerals to be found in the mountains. Previously it was only geological prospecting expeditions that took any part in this work, but now this sort of mining has become the concern of the entire population.

Since the outbreak of war the farmers of Mountain Badakhshan have sent as gifts to the men at the fronts thousands of pieces of warm wear woven from the wool of our mountain sheep. Of stockings alone, 5,000 pair have been sent. (There are less than twice that number of families in all of Badakhshan—W.M.) They have also sent home-woven fabrics which compare to the factory product in quality. Even the school children who belong to the Pioneer organization have contributed by gathering 15,000 pounds of vitamin-bearing sweet brier for our hospitals.

The Pamir is proud of its first city—Khorog. During the war the city has continued to grow and progress. The second section of the Khorog Hydroelectric Project recently went into operation. The city now has electricity not only for lighting but for other needs including those of the local industries. Khorog is not only the administrative center of Badakhshan, but the center of its cultural and artistic life. The National Theater has made veritable alpine expeditions over distances of hundreds of miles to bring the questions of the day to the dark corners of the Pamir in militant word and song, thus mobilizing them for the struggle against fascism.

by M. Prishchepa

Secretary of the Mountain Badakhshan Regional Committee of the Communist Party of Tadzhikistan. *Izvestia*, April 24th, 1943

(This article was *telephoned* to Moscow from Stalinabad, which is only ninety miles from the Afghan border and did not even have railway connection with Moscow before the revolution.)

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APPENDIX V

TABLE X

A. GROWTH OF POPULATION IN CENTRAL ASIA, 1926–1939

Republic	*Census of December 17, 1926*			*Census of January 17, 1939*			*% increase, 12 yrs.*		
	Urban	*Rural*	*Total*	*Urban*	*Rural*	*Total*	*Urban*	*Rural*	*Total*
Turkmen	136,982	861,172	998,154	416,376	837,609	1,253,985	204	*—2.7	25.6
Uzbek	1,012,274	3,553,158	4,565,432	1,445,064	4,837,382	6,282,446	42.8	36.1	37.6
Tadzhik	106,003	926,213	1,032,216	251,882	1,233,209	1,485,091	137.6	33.1	43.9
Kirghiz	122,333	879,364	1,001,697	270,587	1,188,714	1,459,301	121.2	35.2	45.7
Total	1,377,592	6,219,907	7,597,499	2,383,909	8,096,914	10,480,823			

B. STATISTICS ON UZBEKISTAN

	1913	*1928*	*1932***	*1937*	*1937 in % of 1913*	*1937 in % of 1932*
Cap. of power plants in thous. kw.	3	12.6	27.5	80.	26.6 times	290.9
Output of electricity in mill. kwh.	3.3	34.3	93.6	276.2	83.7 "	295.1
Petroleum and gas output, thous. ton	13.2	17.7*	46.8	365.0	27.7 "	7.8 times
Metal-working industries, mill. rub.	2.7	4.3*	32.2	146.	54. "	453.4
Cotton-ginning, in mill. rubles	219.9	179.1*	293.1	585.6	266.3%	199.8
Cotton fiber, in thous. tons	177.8	147.9*	241.2	466.4	262.3	193.4
Cotton textiles, in mill. rubles	0.2	0.2*	12.3	58.6	293 times	476.4
Vegetable oils, in mill. rubles	14.2	31.5*	37.1	64.4	4.5 times	173.8
Collectivization of agric. July 1						
in percentage of households	0	1.2	81.7	95.0		
in percentage of sown acreage	0	1.2	68.1	99.4		
Land under crop, in thous. hect.	2166.2	1856.4	2594.9	2653.6	122.5%	102.3
Sown to grain, in thous. hect.	1521.0	1035.2	1106.3	1362.2	89.6	123.1

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Industrial crops, in thous. hect.	440.5	623.6	1176.5	1000.3	227.1	85.0
Of which, cotton, in thous. hect.	423.5	588.5	989.8	946.2	223.4	95.6
Fodder crops, in thous. hect.	161.1	141.7	274.3	230.1	142.8	83.9
Hay harvest, perennial grasses in thous. hect.	161.1	109.9	134.6	157.5	97.8	117.0
Grain crop, in hundreds met. tons	1046.6	843.0	627.9	988.3	91.	157.
Raw cotton, in hundreds met. tons	516.4	554.8	814.1	1527.9	296.	188
Tractors on hand, end of year, thous.	0	1.2	7.1**	21.5		302.8
H.P. tractors, end of yr., in thous. H.P.		11.8	106.1**	312.9		294.9
Harvester combines, end of yr., thous.			0.3**	1.4		466.7
Machine and Tractor Stations	0	0	78. **	163.		209.
% coll. farm acreage served			58.4**	90.7		
Head of cattle, end of year**						
Large horned cattle, thous. head	—	—	880.6	1410.9		160.2
of which, cows			330.8	481.5		145.6
Hogs, thous. head	—	—	38.9	76.3		196.1
Sheep and goats, thous. head	—	—	1987.4	3980.2		200.3
Horses, thous. head	—	—	350.9	381.4		108.7
Head of cattle on collective stock-raising farms, end of year						
Large horned cattle, thous. head	0	0	20.1	117.8		586.1
of which, cows	0	0	5.8	24.1		415.5
Hogs, thous. head	0	0	0.8	13.8		17 times
Sheep and goats, thous. head	0	0	625.4	1417.0		226.6
Horses, thous. head	0	0	6.5	65.2		10 times
Railway line, in thous. kilometer	1.1	1.8	1.9	1.9	172.7	100.0
Freight turnover, (goods shipped plus goods received), mill. tons	2.7	—	6.1	12.1	4.5 times	2 times
Wholesale trade, mill. rubles	—	535	1062	4671		439.8

* Fiscal year, 1927–1928
** 1933 in 1932 column

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TABLE X—*Continued*

Education in Uzbekistan, school years	*1914/1915*	*1928/1929*	*1932/1933*	*1937/1938*	*1937/1938 in % of 1914/1915*	*1937/1938 in % of 1932/1933*
Attendance at elementary and high schools	17,300	167,900	644,300	931,800	53.9 times	145
of which, in the 5th to 10th years	—	14,500	28,600	135,800		475
Attendance at higher educational institutions	0	4,000	12,200	15,600		128
Attendance at technical schools (secondary)	100	7,700	12,600	17,400	174 times	138

Cultural progress	*1913*	*1928*	*1932*	*1937*	*1937 in % of 1913*	*1937 in % of 1932*
Public libraries	—	187	607	1150		189.5
Volumes in public libraries, in thousands	—	358.8	1366	1656		121.2
Community centers and clubs	0	801	3086	4196		136.0
Film projectors	25	121	469	533	21.3 times	113.6
of which, sound	0			263		
Number of theatre companies	1	—	32	36	36 times	112.5
Number of newspapers published	14	25	132	202	14.4 times	153.0
Public Health (excludes facilities for railway employees, other than hospital beds)						
Number of hospital beds	900	4400	9300	15800	17.6 times	169.9
Maternity beds	62	348	939	1987	32 times	211.6
Number of places in children's day-nurseries	0	800	11700	28500		243.6
Children's and mothers' health centers		58	122	163		133.6
Doctors	128	1172	1659	2301	18 times	138.7

Source of foregoing data on Central Asian population and Uzbekistan: Sotsialisticheskoe Stroitelstvo SSSR, Gosplanizdat, Moscow, 1940.

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C. MODERNIZATION OF AGRICULTURE IN THE CENTRAL ASIAN REPUBLICS IN 1938

								% of work done by tractor power		
								Spring Sowing	*Grain Harvesting*	*(Autumn) Ploughing*
Uzbek	8452 [1]	99.8 [2]	175 [3]	79 [4]	22722 [5]	1497 [6]	5969 [7]	31	24	84
Tadzhik	3862	99.2	48	19	3832	82	1167	15	3	64
Kirghiz	1849	98,3	63	43	5128	779	1984	29	28	35
Turkmen	1654	99.6	52	27	4225	175	1100	48	16	95

Source: Sotsialisticheskoe Selskoe Khosiaistvo Soiuza SSR, Gosplanizdat, Moscow, 1939

[1] Number of collective farms
[2] Percentage of sown area collectivized
[3] Number of Machine and Tractor Stations serving the collectives
[4] Number of state farms
[5] Tractors in agriculture
[6] Harvester combines in agriculture
[7] Trucks in agriculture

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